

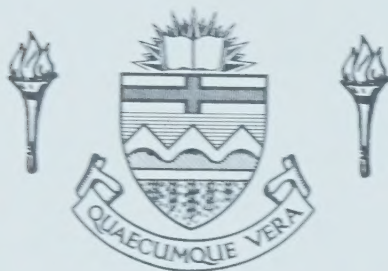
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A CRITICAL EXAMINATION OF JOHN DEWEY'S THEORY OF INQUIRY  
AND SOME OF ITS IMPLICATIONS FOR EDUCATION

by



JOHN LLOYD DALE STEWART

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH  
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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "A Critical Examination of John Dewey's Theory of Inquiry and Some of Its Implications for Education" submitted by John Lloyd Dale Stewart in partial fulfillment of the requirement for the degree of Doctor of Philosophy.





## ABSTRACT

The thrust of the dissertation is to critically examine John Dewey's theory of inquiry and consider some implications for education. Dewey's philosophic position and his educational recommendations are conceptually identified and, as such, the criticism that generally applies to his theory of inquiry will be applicable to his educational recommendations.

An attempt has been made to show that inquiry can be looked at from the point of view of Dewey's metaphysics, with topics like nature, events, experience, and intelligence. An understanding of these concepts will allow a perspective of inquiry that follows in a pattern of continuity throughout Dewey's explanations.

The same pattern emerges when considering the psychological perspective. After completing an analysis of concepts like habit, impulse, custom, consciousness, the pattern of inquiry is again apparent. The psychology of the human organism is described in a fashion similar to the metaphysical perspective, that is, for Dewey to describe the functioning of the organism and how people behave, is to describe the manner of how people think, or should think.

The theory of inquiry with its logical form is considered in detail and the core of the dissertation is to offer analysis and criticism in seven general areas of concern. The origination of logical forms, the indeterminate situation, the role of judgment, the warranted assertions, and the use of the phrase "scientific



method," all constitute the areas where Dewey's vague formulations render him unclear and/or mistaken at important points.

The educational recommendations were limited to discussions about the development of intelligence, growth as an educational aim, and the role of the teacher in the classroom. Again, Dewey's rather ambiguous formulations make a clear explanation of his recommendations extremely difficult.





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## TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION . . . . .	1
II. THE METAPHYSICAL PERSPECTIVE . . . . .	18
III. THE PSYCHOLOGICAL PERSPECTIVE . . . . .	54
IV. THE PATTERN OF INQUIRY . . . . .	78
V. SOME IMPLICATIONS FOR EDUCATION . . . . .	125
SELECTED BIBLIOGRAPHY . . . . .	166





## Chapter I

### INTRODUCTION

#### I

John Dewey's conversion to Pragmaticism or the version of which he himself named as Instrumentalism may be seen to have been guided by influences and experiences of various sorts. As Dewey himself said, most of the influences "have come from persons and situations more than from books."<sup>1</sup> The gradual development took some 40 years; from the time of his birth in 1859 in Burlington, Vermont, to the publication of his first series of books on education by 1899. The change of course does not end there, but by the turn of the century, Dewey was committed to naturalistic empiricism and the development of the theory of inquiry.

He had a rather regional and undistinguished career in school and college, finishing with good marks (evidence of his general astuteness), but no one suspecting him as one of America's most influential philosophers in embryo. Early in life, he had a very strong Christian upbringing by his mother and this may have had some restraining effects in his interest in philosophy till his last two years in college.

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<sup>1</sup>J. Dewey, "From Absolutism to Experimentalism," in John Dewey on Experience, Nature, and Freedom, ed. by R. Bernstein (New York: Bobs-Merril Company, Inc., 1960), p. 13.



After graduating from Vermont, he went to teach school in Oil City, Pennsylvania, with his cousin. This was the occasion for his first publication in 1882. It was on the "Metaphysical Assumptions of Materialism," and was published in the Journal of Speculative Philosophy.<sup>2</sup>

Shortly after this, he went to John Hopkins University to do graduate work and came into contact with G. S. Morris, who taught him about Hegel and was to become a life-long friend, and a Mr. Charles Peirce. Although he expressed no love for the content or method of logic that Peirce was instructing at that time,<sup>3</sup> Peirce was to have strong effects on him later in life. At this time, however, Hegel appealed to him, even though he had continual concerns for the practical everyday decisions that we all have to make. Even at this stage, Dewey was arguing for practicality in philosophy.<sup>4</sup>

After graduating, he taught at several universities for a short time, including Michigan, where he met Franklin Ford, an economic journalist, who gave him new insights into many social matters. Concurrent with this, he was Faculty Advisor for the Student Christian Movement (Evangelical) on campus, and he wrote a number of articles for them, like, "Faith and Doubt," and "The

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<sup>2</sup>R. J. Bernstein, John Dewey (New York: Washington Square Press, 1966), p. 26.

<sup>3</sup>G. Dykhuizen, The Life and Mind of John Dewey (London and Amsterdam: Southern Illinois Press, 1973), p. 31.

<sup>4</sup>R. J. Bernstein, John Dewey, p. 12.





Place of Religious Emotion."<sup>5</sup> While being active in this movement, his philosophical endeavors were based on a combination of Hegel and Darwin. During this time (1884-1889), John Dewey and G. S. Morris were known as the "centre of idealist thought."<sup>6</sup>

In 1890, Dewey read William James', Principles of Psychology, and plunged headlong into the "new psychology." It was his concern for the practical, the conviction that philosophy could and should be concerned with everyday problems, that finally led him to move from Hegel and the traditional Christian faith. He later stated that James had such a profound effect on him that the biological conception of mind had "worked its way more and more into all of my ideas as a ferment to transform old beliefs."<sup>7</sup> Until this time, Darwin had answered the question of the evolution of the species except that of mind or consciousness, and Hegel had for him given a "scientific" account of the latter. He had accordingly combined Hegel and Darwin in all of his lectures.

Next, in 1894, he moved to the new University of Chicago and came into contact with Jane Addams and the Hull House, a "motley group of workers and radicals."<sup>8</sup> But here were the

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<sup>5</sup>G. Dykhuizen, The Life and Mind of John Dewey, p. 50.

<sup>6</sup>Ibid., p. 45.

<sup>7</sup>R. Wenley, The Life and Works of George S. Morris (New York: Macmillan and Co., 1917), p. 272.

<sup>8</sup>R. J. Bernstein, John Dewey, p. 36.



practical concerns, and he met with the kind of problems that he thought philosophy could work upon.

According to Bernstein:

This was the very "exchange" that Dewey hoped to realize. Under the impact of the experiences of Hull House, Dewey's social philosophy became articulated and more specific. From the nineties on, he became America's intellectual spokesman for practical social reform, for the elimination of specific injustices and for the positive reconstruction of a democratic community....<sup>9</sup>

There might be those who would point out Bernstein's loyalty to Dewey in naming him as "America's spokesman against injustice," but one thing that is clear, is that from now on Dewey had to take philosophy down to the lives of common people, and to the problems of men.

One such problem was education. Since his convictions had become somewhat clarified, he moved to publish a series of books and articles on the subject of education. By 1900, he had published some 20 pieces (articles and books) on education alone.<sup>10</sup> These books include his still famous, My Pedagogic Creed (still heavy with Christian emphasis), The Child and the Curriculum, and The School and Society. The concern with education as the primary means of social reform became one of the main themes of his later works.

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<sup>9</sup> Ibid., p. 37.

<sup>10</sup> P. A. Schlipp, The Philosophy of John Dewey (New York: Tudor Publishing Co., 1939), p. 615.





## II

It is in 1910 that Dewey first formulated the method of inquiry as it relates to education. It is contained in his work entitled, How We Think, and we are told how the method of inquiry can be applied to all facets of life, in particular, to the problems in education. If we train the young to think and, therefore, reconstruct the environment, society will be reformed and our ills overcome. This method of inquiry was something that could be taught, if only implicitly, and in form if not in fact, and the five steps of the reflective method were given as follows:

In between, as states of thinking, are (1) suggestions in which the mind leaps forward to a possible solution; (2) an intellectualization of the difficulty or perplexity that has been felt (directly experienced) into a problem to be solved... (3) the use of one suggestion after another as a leading idea, or hypothesis,... (4) the mental elaboration of the idea or supposition as an idea or supposition (reasoning, in the sense in which reasoning is a part, not the whole, of inference); and (5) testing the hypothesis by overt or imaginative action.<sup>11</sup>

As one can see, starting with the flow of suggestions to the mind and terminating with a testing of a plan of action, one is led from an unsettled to a settled situation. This is the function that converts blind action into intellectual activity. This is the process that leads the student to new enriched meanings in his experience. The reflective process is to be the method of the

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<sup>11</sup>J. Dewey, How We Think (Boston: D. C. Heath and Co., 1910, 1933), p. 107. Italics in the original.



curriculum in the schools because thinking is, in fact, a way of life -- a manner of living.

In spite of rather pretentious claims as to the value and purpose of inquiry, it becomes apparent to Dewey that some revisions are in order. The second formulation of the inquiry method appears in Democracy and Education (New York: Macmillan, 1916). Bernstein claims that the period immediately before and after the First World War is the zenith of John Dewey's influence in America.<sup>12</sup> This is certainly reflected by the manner and style in which this particular book is written. All the ills of society can be overcome by the inquiry method. One need only look at the table of contents of Democracy and Education to appreciate the full extent of how inquiry permeates or can permeate the society. "What nutrition and reproduction are to physiological life, education (method of inquiry) is to social life."<sup>13</sup> Education is as necessary as food and sex, and the central core of education is the inquiry method. Dewey, at least, believes he has the answers to all the questions, at least all the questions he asked. The formulation of this revised version of the method of inquiry reads as follows:

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<sup>12</sup> R. Bernstein, John Dewey, p. 59.

<sup>13</sup> J. Dewey, Democracy and Education (New York: Macmillan and Co., 1916, 1963), p. 9.





So much for the general features of a reflective experience. They are (i) perplexity, confusion, doubt, due to the fact that one is implicated in an incomplete situation whose full character is not yet determined; (ii) a conjectural anticipation---a tentative interpretation of the given elements... (iii) a careful survey...of all attainable considerations which will define and clarify the problem at hand; (iv) a consequent elaboration of the tentative hypothesis to make it more precise and more consistent... (v) taking one stand upon the projected hypothesis as a plan of action which is applied to the existing state of affairs: ....<sup>14</sup>

Some difference can be seen (for example, inquiry now starts with the confused situation rather than with the flow of suggestions to the mind) and these will be discussed in detail in Chapter IV.

The last formulation came in Dewey's most technical philosophical work -- Logic: The Theory of Inquiry, (New York: Henry Holt, 1938). This formulation will be examined in detail in Chapter IV. There appears to be six steps now, one added to show that the difference between common sense and science resides in their respective subject-matters and not in their logical forms. First, one starts with the indeterminate situation where both inquirer and situation are indeterminate. Second, a problem is instituted, that is, the indeterminate situation is now seen as a specific problem that needs to be solved. Third, the determination of the facts of the case and in the light of such determination the formation of hypotheses. Fourth, reasoning to determine the possibility of the success of any of these hypotheses. Fifth,

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<sup>14</sup>Ibid., p. 150.



the operation of fact-meanings to give an operational character to the inquiry which means experiment. Sixth, one must consider the operational nature between common sense and science.

Now that we have very briefly traced the development of the method of inquiry, one might ask the question: "Why is Inquiry important?" In Dewey's view, it is the best method of acquiring what is called knowledge, at least the best method that mankind has come up with so far. He calls it the "scientific method" or the "method of experience"; also, he claims that intelligence is "the short name for competent inquiry."<sup>15</sup> It is this theory that holds Dewey's works and ideas together. Sidney Hook claims it to be "the most ambitious attempt ever made to formulate the rationale of modern scientific method."<sup>16</sup> The importance of the inquiry method is established, but some discussion is required to show how Dewey applies the method to the various forms of experience. This will take place in the next portion of this paper.

### III

While John Dewey was engaged in formulating the theory of inquiry (the final formulation of which came in 1938 when he was 79 years of age), he was, on the one hand, trying to develop his

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<sup>15</sup>J. Dewey, Problems of Men (New York: The Philosophical Library, 1940), p. 330.

<sup>16</sup>S. Hook, John Dewey, An Intellectual Portrait (New York: The John Day Co., 1939), p. 101.



metaphysical and psychological concepts to provide theoretical foundations to the theory itself, and was, on the other hand, applying the method of inquiry in the various areas of human experience, viz., morals, politics, and education to demonstrate how such an application could realize the moral and social ideals he stood for, and, in his view, the new industrialized American society should stand for.

Two important points should be noted in this context. First, Dewey advocated a complete break with the "philosophical past," and all its explicit and implicit dualisms as well as its quest for certainty. Second, in developing these theories and covering many areas, he came very close to developing a "system" of philosophy, though his method was only a method of inquiry and inspite of his earlier "disparaging remarks...about the need for a system of philosophy." For he admitted:

I find that with respect to the hanging together of various problems and various hypotheses in perspective determined by a definite point of view, I have a system.<sup>17</sup>

Now, once the "hanging together of problems in a perspective" is admitted, Dewey becomes philosophically committed. He, in fact, recognizes this commitment when in response to Morris R. Cohen's sharp criticism of his philosophy but the approval of his "personal liberalism," he writes,

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<sup>17</sup>J. Dewey, Problems of Men, p. 193.





I must add not only that this liberalism is definitely rooted in the very philosophy to which he [Cohen] takes exception, but that any theory of activity in social and moral matters, liberal or otherwise, which is not grounded in a comprehensive philosophy seems to me to be only a projection of arbitrary personal preference.<sup>18</sup>

We shall now try to see briefly how Dewey, in his numerous works on various subjects, tried to apply the theory of inquiry to solve problems of different kinds. Our treatment, as suggested, will be brief since the subject-matter of this dissertation is the theory of inquiry itself, not its application to various fields except education and topics related primarily to the educative process. We shall try to do this under two broad headings, viz., moral philosophy and social philosophy, and appropriate sub-headings as is felt necessary.

### 1. Moral Philosophy

Direct experiencing of good or what Dewey calls the "original prizing experience" is what he also describes as "qualitative immediacy" or the bare existence of a value, "a dumb formless experience of a thing as good."<sup>19</sup> Such experience is pre-cognitive.<sup>20</sup> There are some careless passages where Dewey claims that direct possession and enjoyment of goods "passes insensibly and inevitably

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<sup>18</sup> Ibid., p. 203.

<sup>19</sup> J. Dewey, Experience and Nature (New York: Dover Publication, 1958), p. 401.

<sup>20</sup> J. Dewey, Logic: The Theory of Inquiry (New York: Henry Holt & Co., 1938), p. 106.



into appraisal,"<sup>21</sup> i.e., problematic situation. But this is an oversimplified statement. For, according to Dewey, reflective thinking or any kind of evaluative process can occur only in the face of a problematic situation. As Dewey himself writes, "Valuation takes place only when there is something the matter; when there is some trouble...some conflict...."<sup>22</sup>

Now, the important point for Dewey is that valuation judgments are not marked off methodologically from other kinds of scientific judgments. What he maintains is that "valuation" is a special case of his "general theory of inquiry." He adds,

And in calling my theory on this matter a special case of my general theory, I intend to call attention to the fact that I have denied that as judgments, or in respect to method of inquiry, test, and verification, value-judgments have any peculiar or unique feature.<sup>23</sup>

However, whether the application of the theory of inquiry in constructing (not finding) the good with an open-ended aim, namely, "growth" has succeeded in solving problems of valuation and obligation remains a hotly debated issue. There are

<sup>21</sup>J. Dewey, Experience and Nature, p. 398.

<sup>22</sup>J. Dewey, Theory of Valuation (Chicago: The University of Chicago Press, 1939), p. 34.

<sup>23</sup>J. Dewey, "Valuation Judgment and Immediate Quality," The Journal of Philosophy, Vol. XL, 1943, p. 315. Reprinted in Problems of Men, pp. 250-260.



philosophers<sup>24</sup> who think and argue that Dewey's efforts make sense; there are others<sup>25</sup> who reject his position as ambiguous and inadequate. We need not enter into this debate here as our consideration of the theory of inquiry itself in Chapter IV will deal with the question of its adequacy as a method of investigation.

## 2. Social Philosophy

"Social philosophy" itself is a complex notion and can be seen as having a variety of inspirations as well as a mixture of different types of arguments, such as, sociological, ideological, and philosophical. However, before we can distinguish the different trends in Dewey's social thinking, it can be pointed out that some contemporary political scientists tend to consider John Dewey -- particularly, for his work The Public and Its Problems (1927) -- as "the pioneer of the contemporary movement in scientific

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<sup>24</sup> See, for example, Sidney Hook, "The Desirable and Emotive in Dewey's Ethics," in Sidney Hook (ed.), John Dewey: Philosopher of Science and Freedom (New York: The Dial Press, 1950), pp. 194-216; George R. Geiger, John Dewey in Perspective (New York: Oxford University Press, 1958), Chapter III; R. W. Sleeper, "Dewey's Metaphysical Perspective: A Note on White, Geiger, and the Problem of Obligation," The Journal of Philosophy, Vol. LVII, 1960, pp. 103-114.

<sup>25</sup> See, for example, Morton G. White, Social Thought in America (New York: The Viking Press, 1949), pp. 214ff; C. L. Stevenson, Ethics and Language (New Haven: Yale University Press, 1948), pp. 256-257, 261ff; N. C. Bhattacharya, "Inquiry, Values and Growth: A Re-Assessment of Dewey's Theory of Valuation," Educational Theory, Vol. 25, No. 1, Winter, 1975, pp. 92-101.





political theory."<sup>26</sup> This is doubtful, for as we shall see, the political concepts which Dewey used in his writings had much wider implications than the "arts and ideals of political control."

(a) For example, "democracy" for Dewey is more than a method of conducting government, of making laws and carrying on administration. For him, "It is...a way of life, social and individual."<sup>27</sup> While Dewey recognizes the fact that there are conflicting interests in the society, he at the same time claims that the method of inquiry can be applied to solve these conflicts, and solutions can be obtained which can transcend all interested or partial solutions of the problems. The aim of the democratic way of life is to attain what he calls "the public interest" or "common good" which will prevail when the method of inquiry is employed to resolve social conflicts. But the claim that the method of inquiry can be applied to complex and conflicting situations has been shown to be unwarranted.<sup>28</sup> The social ideal expressed by such phrases as "the general welfare," "the public interest," and

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<sup>26</sup> A. H. Somjee, The Political Theory of John Dewey (New York: Teachers College Press, Columbia University, 1968), p. 6. For a critical review of the book, see, N. C. Bhattacharya, "Review Article--Philosophy, Ideology, and Political Theory," Educational Theory, Vol. 21, No. 1, Winter, 1971, pp. 117-125.

<sup>27</sup> J. Dewey, Problems of Men, p. 58; also, Democracy and Education, p. 87.

<sup>28</sup> See, N. C. Bhattacharya, "John Dewey's Instrumentalism, Democratic Ideal and Education," Educational Theory, Vol. 18, No. 1, Winter, 1968, pp. 60-72.



"the common good" has also been shown to be elusory.<sup>29</sup> In other words, Dewey was unable to show that by instituting the method of inquiry in social and political "problematic situations" we can attain his "ideal democratic way of life."

(b) John Dewey has been well-known as a liberal philosopher, social reformer, and educational thinker. One of his famous works, Democracy and Education (1916) was for example reviewed by Walter Lippman who said that the book was a great work "because it expresses more deeply and more comprehensibly than any other that could be named the best hope of the liberal man."<sup>30</sup> However, his idea of liberalism was based on the operation of co-operative intelligence as displayed by science in "a limited and relatively technical area" which he thought could be worked out as "the working model of the union of freedom and authority" in a liberal democratic society.<sup>31</sup> However, he laid too much emphasis on "social values" in reconstructing the traditional concepts of "individual right," "personal liberty of free expression" and the rest. He maintained, for example,

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<sup>29</sup> Ibid.; See also, J. D. B. Miller, The Nature of Politics (Harmondsworth, England: Penguin Books Ltd., 1965), Chapter 4: "Is There a General Interest?" pp. 52-66; J. A. Schumpeter, Capitalism, Socialism and Democracy (New York: Harper Brother, 1950, 3rd ed.), p. 251.

<sup>30</sup> Walter Lippman, "The Hope of Democracy," in The New Republic, July 1, 1916, p. 231.

<sup>31</sup> See, J. Dewey, "Science and the Future of Society" in Joseph Ratner, (ed.), Intelligence in the Modern World: John Dewey's Philosophy (New York: The Modern Library, 1939), pp. 359-361.



...it follows that any merely individual right must yield to the general welfare. As long as freedom of thought and speech is claimed as a merely individual right, it will give way, as do other merely personal claims, when it is, or is successfully represented to be, in opposition to the general welfare.<sup>32</sup>

In recent years, this notion of "liberalism" and its consequences have come under strong attack. Writing in 1956, Professor Israel Scheffler argued that while we must reject Dewey's inadequate philosophy, we should not, however, overlook the fact that John Dewey was indeed a liberal.<sup>33</sup> But most participants in the current movement known as "Revisionism in American History of Education" dismiss Dewey's liberalism, and claim that the thrust of progressive education and reform was in effect, conservative.<sup>34</sup> We hope to be able to discuss some of the ambiguities in Dewey's educational proposals in Chapter V.

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<sup>32</sup> J. Dewey, Liberalism and Social Action (New York: G. P. Putnam's Sons, 1935), p. 66.

<sup>33</sup> Israel Scheffler, "Educational Liberalism and Dewey's Philosophy," Harvard Educational Review, Vol. 26, 1956, pp. 190-198. Reprinted in his book Reason and Teaching (London: Routledge and Kegan Paul, 1973).

<sup>34</sup> Literature in this area is constantly growing. Some examples are: Clarence J. Karier, "Liberalism and the Quest for Orderly Change," History of Education, Quarterly, Spring, 1972, pp. 57-80; Clarence J. Karier, Paul Violas, Joel Spring, Roots of Crisis: American Education in the Twentieth Century (Chicago: Rand McNally College Publishing Company, 1973); Walter Feinberg, Reason and Rhetoric: The Intellectual Foundations of Twentieth Century Liberal Educational Policy (New York: John Wiley and Sons, Inc., 1975); Clarence J. Karier, Shaping the American Educational State: 1900 to the Present (New York: The Free Press, 1975).





## IV

Before we can analyze and examine Dewey's theory of inquiry, it is essential for us to understand his metaphysical and psychological perspectives on which the theory of inquiry is claimed to be based. Dewey's theory of inquiry, it should be noted, is not pure logic, nor is it what is ordinarily meant by epistemology, nor is it psychology. It is a combination of all these. We, therefore, propose to consider the Metaphysical Perspective, i.e., the fundamental metaphysical concepts in the following chapter. Chapter III will be devoted to a consideration of his important psychological notions which are related particularly to reflective thought. In discussing these, as well as the theory of inquiry itself in Chapter IV, we shall try to point out that there is an important notion, namely, that of continuity which underlies his entire philosophy. Dewey was opposed to dualism, dualisms of all kinds: between mind and matter, science and morals, thought and action, theory and practice -- and this is very clearly reflected in his formulation of the pattern of inquiry which is one continuous process beginning with "brute" existence as immediately experienced (indeterminate situation) and leading step by step, not only to the resolution of the state of indeterminacy in experience, but also to the transformation of the original situation which prompted the inquiry in the first place. Thus, the theory of inquiry is not simply a "method of problem solving," it is also



the method of reconstructing the obstructing situation. For Dewey and his pragmatic followers, truths and goods are "made" rather than "discovered," and the theory of inquiry is the instrument that can produce the true as well as the good. Education is concerned with both.



## Chapter II

### THE METAPHYSICAL PERSPECTIVE

According to Dewey, without an understanding of the metaphysical perspective, there can be no real understanding of the empirical method that he calls the "theory of inquiry." He tries to show this in Experience and Nature, and in this connection claims:

The title of this volume, Experience and Nature, is intended to signify that the philosophy here presented may be termed either empirical naturalism or naturalistic empiricism, or, taking "experience"<sup>1</sup> in its usual signification, naturalistic humanism.

The above quote does not shed any clear light on his versions of either empiricism or naturalism, but it can be seen as an attempt on his part to place himself in the mainstream of both. It would seem to indicate that he would have us believe his concepts of 'nature' and 'experience' must deal with the here and now of the human situation. It also appears that, for Dewey, the central concepts of his naturalistic metaphysics are 'experience' and 'nature.' Within this framework, I have also chosen to discuss the notion of 'intelligence' as it is the part of metaphysical perspective we are about to consider, and is central to the theory

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<sup>1</sup>J. Dewey, Experience and Nature (New York: Dover Publications, 1958), p. 1a.





of inquiry. As noted in the previous chapter, for Dewey, "intelligence is competent inquiry at work."

## I

### NATURE

In general, it can be stated that Dewey views nature as a series of events that stretch in a continuum from the inorganic world to the organic world. The two main dimensions of this continuum are 'man' and 'objects.' The greater concern lies not with the distinction of these two dimensions, but rather with their interaction and inter-relationship. One should not be concerned with 'man' per se by himself, nor with 'objects' per se by themselves. The discussion on nature turns out to be a discussion on how these dimensions interact. Nature, therefore, is a matter of events or transactions that have qualities--emergent qualities. These qualities simply "are"; they have emerged and they reflect the interaction between the individual and his environment. The objects that one would normally select as "out there" (trees, cars, birds, etc.) are therefore expressions of this interaction; they are the events.

These events are an on-going series or processes, and there are no special forces that prepare any one event for any other event. That is to say, Dewey's explanation of this process is



neither deterministic nor teleological. Events and qualities just are: not developing towards anything in particular, nor because of anything in particular.

The interactions involve both the individual and the "objects," the two dimensions of the total framework of "nature." The term "objects" carries a different connotation for Dewey than what is generally accepted. Objects for Dewey are not concrete things that are set out there apart from the individual. They are not objects of knowledge. Objects are, however, had and enjoyed. As the individual interacts with his environment, he perceives, say, a table. The total structure of that perception, that is, what he sees, how he feels, what he does, is called the event. The how and the what are the qualities. The enjoyments (or sufferings) are self-evident, but only because they are obviously presented to the senses. The qualities are in that they are had and enjoyed, they are what they can do for us. They are the immediately given of our experience.

It should be pointed out that in his concern for the immediacy of directly experienced objects and that the enjoyment becomes part of that object, Dewey may be blurring an important distinction. With Dewey we could not be happy because we ski, but we could only "ski-happy." An even more serious contention arises with the notion that the objects as directly experienced are ineffable and thereby unknowable and unknown. We cannot know the directly experienced



object because it is just given and had, and knowledge has no concern for the immediate. Immediately experienced things may be pointed to in that they do something for us, but they cannot be defined or take on the quality of being known. This means that the only way to discover that there are "objects" out there, dichotomized from us, is by way of implication. Through our enjoyments and sufferings, what we see and what we feel, we can conclude (i.e., "feel") that nature has some sort of relationships even though we cannot precisely know what the immediately given natural objects are like. Here we can notice the "gap"--which Dewey will find difficult to bridge.

Dewey claims that we should not look upon the events as termini but only as ends-in-view. To insist that nature is an affair of endings (end-in-view) is only to assert that there is no once-and-for-all ending or beginning. Nature, therefore, comes to be viewed as:

...an affair of affairs, where in each one, no matter how linked up it might be with others, has its own quality.<sup>2</sup>

Within these interactions of the natural process are "causal mechanisms" and "temporal finalities." Although this may sound like Dewey has slipped back into another metaphysic, he gives these two phrases particular meanings. Temporal finalities is

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<sup>2</sup>Ibid., p. 97.





another word for "end-in-view" and causal mechanisms refer to the sequential order that is involved in any historical occurrence. It appears, then, that these events come to us in a sequence and we attach a temporal quality to these events so that we can refer to this event and that event. Causality is simply the description of that sequential order. Events come to us with even yet another quality. Every successive event is but one stage in an entire serial process and each event is "expectant." That is, we anticipate that each event will lead us to yet another event or end-in-view. It is the nature of the event that we should come to have these expectations. This allows us to project consequences and other end-in-views, according to Dewey.

The notion of the immediacy of events with their various qualities still presents some problems and confusions. The world of events is given, comes to us expectant; yet we determine an end-in-view in some form of serial order that is either macroscopic or microscopic. How do we reconcile that the total world of events is not simply its own making, that everything is not in fact sensation? We as individuals are interacting, but with what are we interacting? If the object is my sensation, we have a case for epiphenomenalism. If my sensation is given and the object behind the sensation is ineffable, then we have a case for sense-data version of empiricism.



Perhaps the confusion arises because Dewey has not really explained what is an event. In his endeavor to reconcile the tradition of idealism and empiricism, all he has really given us is elements of both, and they do not seem to reconcile with one another. This is even more apparent in his discussion on the objects of knowledge. We have not yet an account of how Dewey would justify continuity in the events, not only in a sequential time reference, but in a seemingly existential order as well.

Historically, it has been held that to grasp some finality or reality, is to attain knowledge. If immediate objects are not final, what are the objects of knowledge? Do the objects of knowledge have to be final or absolute? According to Dewey, if there are real "objects" then the objects of experience have to be reduced to mere signs or symbols of the other objects that are real and final. One would, however, get caught up with the different levels of reality and with what was appearance and what was real. Or, if the objects of experiences were the only real and final objects then science would be impossible as the objects that we see and touch and feel would be the only reality. According to Dewey, these problems will and do vanish when the "objects of science" become nature in the instrumental sense. Dewey's answer to this problem of antiquity is to claim that the objects of experience "become" in the process of inquiry as something yet to be known, or an appearance. For Dewey, an appearance is not an



appearance behind which there lies reality. To be called an appearance is simply a functional status, it is not to denote a special kind of existence. They do not denote a less real world, nor do they indicate a more real world.

In order to denote specifically that which is appearance, one should be able to distinguish between the appearing and the non-appearing. This is an extremely important notion as the whole factor of continuity of experience rests with it. According to Dewey, the connecting factor between the two is the concept of 'inference.' If everything came to us as final and absolute, with all the connections established, there would be no problems to be worked out. The endings of organic events (appearances) like seeing, hearing, etc., are immediately the endings of the history of all the natural events. In order to link up the apparents, a mathematical-mechanical system is required and the unapparent is that which is inferred. The need is to establish the connection between the unconnected apparents. Dewey uses the example of mountain peaks that are submerged to the peaks.<sup>3</sup> The peaks appear isolated and non-connected, like the events in nature, but with the use of the mathematical-mechanical order, which is the proper object of physics, the connections between the peaks can be drawn.

This mathematical-mechanical order appears to be a conceptual order, an order of relationships. It would appear,

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<sup>3</sup>Ibid., p. 138-139.



therefore, that the proper objects of physics or the mathematical-mechanical order, link together the appearances or the apparent, and the order becomes the objects of knowledge, not as a final end but as a means to secure an end-in-view. These relationships do not carry an existential quality, at least if they do, Dewey has a form of idealism and his metaphysics would certainly not be a descriptive metaphysics. In an effort to clear up just what the objects of knowledge are and their relationship to the objects of experience, let me quote Dewey directly.

To follow the clues of experience is to see that the so called sensible world is a world of immediate beginnings and endings; not at all an affair of cases of knowledge but a succession of qualitative events; while the so called conceptual order is recognized to be the proper objects of science, since it constitutes the scheme of constant relationships by means of which spare, scattered and casual events are bound together into a connected history. These emergent immediate events remain the beginning and ending of knowledge, but since their occurrence is one with being sensibly, affectionally, and appreciatively had, they are not themselves things known. That the qualities and characters of these immediate apparitions are tremendously modified when they are linked together by "physical objects"--that is, by means of the mathematical-mechanical objects of physics--is a fact of the same nature as that a steel watch-spring is a modification of crude iron ore. The objects of physics subsist (my italics) precisely in order to bring about this transformation--to change, that is, casual endings into fulfillments and conclusions of an ordered series, with the development of meaning therein involved.<sup>4</sup>

Every event comes to us expectant and unknown; by way of inference and the mathematical-mechanical order, a connection is

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<sup>4</sup>Ibid., p. 140.





secured and it is the process of securing, or avoiding the immediate, that is called knowing. The objects of knowledge are, therefore, the objects of physics and these are not objects per se, but are objects of relations.

There are a number of issues that have to be raised at this point. One of Dewey's main concerns was to do away with the duality of the real and the appearing. However, insofar as Dewey must imply regularity or continuity, in much the same way that Locke implied substance, a form of duality exists: a duality of the stable and the non-stable or of the constant and the fluctuating. He does not claim that one is more real than the other, only that the constant order must be assumed for there to be any control over events whatsoever.

There is also a problem with the exact nature of the relationship of the objects of direct experience and the objects of knowledge. In order to make our experience consistent, Dewey has the mathematical-mechanical order to link the appearances into a serial connection. This performs a similar function as Locke's substance. But Locke admitted that our experience was a veil over the real substance. For Dewey, by making experience ineffable, hence unknowable, knowledge cannot be directly connected with events. Objects of knowledge have to be of some other form, something we do not directly experience. How do the objects of knowledge refine my experience of events when my experience only has the quality of



being had? How am I led to the objects of knowledge from the direct experience of situations?

If an event in nature is immediate and given to an individual, how can any one individual make the claim that all of nature is immediate? Surely, the totality of all natural events is much larger than the experience of one individual or even of all individuals. Some function of knowledge would have to be ascribed to the events to arrive at that conclusion (something Dewey cannot do). That is, I would have to know something about my events and that would violate all the metaphysics of naturalistic empiricism. If Dewey is describing nature and experience, wherein does one see the mathematical-mechanical order of relationships? These can only be inferred or assumed. No one individual's experiences can justify the claim of continuity and order throughout nature as a whole.

Santayana has also indicated that there may be some problems with Dewey's description of nature. According to Santayana, naturalists can refer to immaterial things as long as these immaterial things are just a name, aspect, function, or product of physical things going on.<sup>5</sup> It would appear that Dewey's mathematical-mechanical order is more than just a name or just a function (although it does fulfill a function). Insofar as the objects of physics subsist (Dewey, see above quote, my italics) or maintain

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<sup>5</sup>George Santayana, "Dewey's Naturalistic Metaphysics," in The Philosophy of John Dewey, ed. by P. A. Schilpp (New York: Tudor Publishing Co., 1939), p. 246.



support in relation to the immediate given, they are much more than just a function. Without them, there would be no order, no meaning to the primarily given events.

According to Santayana:

Naturalism will break down, however, as soon as words, ideas, or spirits are taken to be substantial on their own account, and powers at work prior to the existence of their organs, or independent of them.<sup>6</sup>

Are the objects of knowledge or rather the mathematical-mechanical order independent to events? Are they prior in the sense they hold the events in an order? The answer appears to be positive. To further substantiate this claim, let us look at Dewey's own words:

Suppose one of those persons of extraordinarily keen vision who abound in the Grimm fairy tales were in fact to see, sensibly to perceive, an object which had all the qualities a physicist attributes to the atom. He would surely see something. But would he see an atom in the definite sense of seeing that which is an object of physical science? I can find but one possible answer, namely: "It depends. If he himself has had a scientific training and if in sensibly perceiving this particular thing he explicitly identifies it as having all the relational properties required by the scientific theory of atomic structure and with no properties incompatible with the later, the answer is Yes. But if he sees it merely as another man of lesser power of vision sees a rock, the answer is, No." In other words, it is not just the thing as perceived, but the thing as and when it is placed in an extensive ideational or theoretical context within which it exercises a special office that constitutes a distinctively physical scientific object.<sup>7</sup>

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<sup>6</sup> Ibid., p. 246

<sup>7</sup> J. Dewey, "Experience, Knowledge and Value, A Rejoinder," in Philosophy of John Dewey, ed. by P. A. Schilpp (Evanston and Chicago: Northwestern University Press, 1939), p. 538.





Apart from the fact that this visionary man's perceptions would have to conform to the theories of science, and apart from the fact that it is odd even to talk about "seeing" any form of relationships, it appears that the constant order of relationships is something and in some relationship. It does exist quite independent of my inference and prior to me having (experiencing) an event. Dewey has made a leap to the unknown. Primary events are so interdependent on secondary objects (objects of knowledge) that they have neither continuity nor meaning alone. The more Dewey leads us to the objects of knowledge, the more we move away from naturalistic empiricism; the more we move toward the immediately given objects, the more we move away from the possibility of knowledge.

## II

### EXPERIENCE

I now wish to consider Dewey's conception of 'experience.' Historically, the concepts of 'nature' and 'experience' have been sharply delineated: the latter representing the subjective, which in some philosophical theories hides the real 'nature.' Insofar as this represents a dualistic conception of the world, it will not fit into Dewey's notion of naturalistic empiricism. Dewey feels that the only way to bridge the gap between experience and nature is to view experience as a method, and by so doing nature can be said to be empirically disclosed. This method of enriching



nature through experience is called the "scientific method."<sup>8</sup>

According to Dewey, common sense will tell us that experience is no peripheral layer stretched about nature. Experience digs deep into nature, it penetrates and is part of nature. The rationale for this conclusion (besides common sense) is that no scientific process would be possible if experience does not become part of nature. For all we have in science is our experience and to ignore that would be to falsify science itself.

Dewey wants to go further than simply to say that experience is part of nature. Nature is what is experienced. When objects (events) are linked to the human organism, the objects become the "what" and the "how" of experience. In short, the objects of nature and the how and what of experience cannot in any way be disassociated or disconnected. The traits that are possessed by the subject matters of experience are just as genuine as the mechanical structure attributed to objects. These traits are found, they are had and they are not to be pushed aside as trivia or something less real.

Given that experience has a part in nature, what is this method that unites experience with nature? The answer to this question is involved in distinguishing between the gross macroscopic subject-matters, (hitherto referred to as events or primary objects) and the more refined objects of reflection (hitherto

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<sup>8</sup>J. Dewey, Experience and Nature, p. 2a.



called the secondary objects or the objects of science). There is only incidental reflection in the primary experience and the more regulative the reflection becomes, the more refined the experience. The objects of science belong to the latter group.

It is at this point that some degree of confusion arises. It now appears that the objects of science are a form of experience, albeit more refined experience. This does not appear to fit into the notion of mathematical-mechanical order or the "physical objects of science" that subsists in order to connect the casual events into a history. It may be that we arrive at the mathematical-mechanical order, by the inquiry method, and these are our interpretations of the objects of physics. This particular interpretation does not save Dewey, however, as it simply puts the constant order of relationships back one step. Perhaps Dewey's own words will clear up the issue.

Immediate empirical things are just what they always were: endings of natural histories. Physical science does not set up another and rival realm of antithetical existence; it reveals the state or order upon which the occurrence of immediate and final qualities depends. It adds to causal havings of ends an ability to regulate the date, place and manner of their emergence. Fundamentally, the assertion that this condition of ordered relationships is mathematical, mechanical, is tautology; that is, the meaning of anything which is such that this perception and use of it enables us to regulate consequences or attain terminal qualities is a mathematical, mechanical--or if you please--logical order. If we did not discover those which we have found, we should have to find another, if deliberate planning and execution are to occur.<sup>9</sup>

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<sup>9</sup> J. Dewey, Experience and Nature, p. 136.



It is easy enough to perceive that immediate objects are not known, they are just had; and that as we refine or reflect upon this experience we move to the realm of knowledge and the objects of science which enables us to regulate the immediate experience. These objects of science are constant, which is the only way to account for continuity of experience, but they do not have any existential qualities, only a functional quality. Dewey seems to have taken a very traditional view of experience, that is, our experience is something we have and it conforms to a real world which we cannot see but exists, and he has removed all notions of existence and in its place put "constant order or relationships" which do not have an existential factor. The confusion arises when these objects of science become "experience" for us, that is, we attain the means to control our primary experience.

Santayana claims that experience has traditionally been held as an epistemological notion.<sup>10</sup> Dewey renders it a metaphysical function. This results, for him, in identifying experience and nature. But this brings up the earlier problem of nature being somewhat larger in scope than experience. How can my experience, even if it is assumed to be objective, be equated to the totality of nature?

Leaving this problem for the moment, Dewey's conception of "experience" needs some further development. To try to further

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<sup>10</sup>G. Santayana, "Dewey's Naturalistic Metaphysics," in The Philosophy of John Dewey, ed. by P. A. Schilpp, p. 253.





clarify the method that allows me to control and direct the primary experience, Dewey refers to the "Denotative Method." In this method, the starting point is, of course, the primary gross experience. Through the process of regulated reflection, the primary experiences become refined till they become the secondary objects, or the objects of "science and philosophy." The secondary objects are then referred back to the primary objects for verification, where they become more refined by inquiry, checked again with primary experience, etc. The role of the primary experience is to form the data and the problems of reflection; the role of the secondary experience is "They explain the primary objects, they enable us to grasp them with understanding, instead of just having sense-contact with them."<sup>12</sup> In the immediate, the primary objects are just that--given--but when the secondary objects are employed as a method to understand the given, the primary objects cease to be isolated details and they receive their meaning by being referred and placed in the larger system of related objects. The primary objects then become part of the continuous events in a connected history or nature.

In fairness to Dewey, it should be noted that the primary objects are explained and understood only in so far as they fit into the serial connections called nature, they are not explained

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<sup>11</sup>J. Dewey, Experience and Nature, p. 7

<sup>12</sup>Ibid., p. 5



and understood as an event per se, as the primarily given is always ineffable. But that does not leave the explanation of denotative method without problems.

The first problem is in reference to the nature of the secondary objects. So far, we have the terms secondary objects, objects of reflection, refined objects, mathematical-mechanical order, objects of science, objects of philosophy, objects of physics, 'physical objects,' and secondary experience. Most of them are used by Dewey as synonymous terms. Dewey has used in the same sentence the terms "objects of science" and "philosophy," making reference to the "secondary objects" or the "objects of reflection."<sup>13</sup> These, I think we can assume are synonymous terms. As a matter of fact, all the terms except "mathematical-mechanical order" can be assumed to be making reference to the same 'object.' Is the mathematical-mechanical order the same as the others?

According to Dewey:

Empirically, individualized objects, unique affairs, exist. But they are evanescent, unstable. They tremble on the verge of disappearance as soon as they appear. Useful arts prove that, within limits, neglect of their uniqueness and attention to what is common, recurrent, irrelevant to time, procures and perpetrates the happening of some of these unique things. Timeless laws, taken by themselves, like all universals, express dialectic intent, not any matter of fact existence. But their ultimate implication is application; they are methods, and when applied as methods, they regulate the precarious flow of unique situations. Objects of natural science are not metaphysical rivals of historical events;

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<sup>13</sup>Ibid., p. 4.



they are means of directing the latter. Events change; one individual gives place to another. But individually qualified things have some qualities which are pervasive, common, stable. They are out of time in the sense that a particular temporal quality is irrelevant to them. If anybody feels relieved by calling them eternal, let them be called eternal. But let not "eternal" be then conceived as a kind of absolute perduring existence or Being. It denotes just what it denotes: irrelevance to existence in its temporal quality. These non-temporal, mathematical or logical qualities are capable of abstraction, and of conversion into relations, into temporal, numerical and spatial order. As such, they are dialectical, non-existential. But also as such they are tools, instrumentalities applicable historic events to help regulate their course.<sup>14</sup>

It appears the mathematical-mechanical order is a non-temporal order that is capable of abstraction (by reflection or inquiry) that assists in controlling and directing the primary events. They give primary events meaning and order. That was also the role of secondary experience or the objects of reflection. But the objects of reflection cannot be the same as the mathematical-mechanical order because the objects of reflection are the kind of objects that we come to know them. They are not 'eternal' or 'non-temporal.' If all of the above terms are synonymous, then Dewey's metaphysics is hopelessly confused. If they do stand for different objects, that is, different in kind, we have a different metaphysics. An example of this latter situation would be something like this: Primary events would be the give and the refined reflective objects would be the abstract formulations that we as humans interpret

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<sup>14</sup>Ibid., p. 148.





about nature and events; and these formulations would be derived from the non-temporal, non-existential, eternal order that guarantees the order and meaning of the primary events. If this represents Dewey's metaphysical naturalism, the latter 'objects' would at least have to be interpreted as a force or entity which performs the same function as Locke's substance. In that case, Dewey has not moved very far from empiricism in the traditional sense.

I do not think Dewey intends the above description of nature and experience; I am not sure how he can avoid it, but I do not think he intends to describe events and nature in that way. What we are left with, however, is a rather confused metaphysics where the metaphysical functional of order is confused with the epistemological function of knowing, directing, and controlling.

As noted in the section on nature, the other major problem relates to the relationship between the primary and the secondary objects. The secondary objects are the means to give meaning and order to the primary objects. But my primary experience has to be understandable at least in the sense that I can recognize it as an event before reflection and refinement take place. I see and feel something that I recognize and can point to, and to the extent that it is had there is already meaning and order in the primary experience. If I have to wait upon reflection to place my primary experience into a connected history, I might not be able to



recognize that I am having an experience at all. I would be able to talk about experience only in the past, never at the present. This mathematical-mechanical order has to act upon my experience simultaneously to my having the experience in order for me to have an experience. That is, the order is there whether or not I perceive it.

It should be noted that the term "experience" has a twofold function for Dewey. Experience explains the how as well as the what in the lives of men. Experience denotes that which men believe, feel, see, love, hate, etc.; it explains how men act and are acted upon. The short name for the how of experience is "experiencing." "Experience" denotes the entire field of events and objects possible to a person; it is an objective quality. There is no separation, in Dewey's view, between the so-called subjective world and the objective world.

The division of the subjective-objective world has been a source of heated discussion in philosophical circles. Dewey is not claiming that one cannot make a temporary detachment or separation of a subject on one hand and the object "out there" (object). But, when the object is held in abeyance, out apart from the individual, the experience is denoted as simply 'experiencing.' Historically, experiencing has been treated as if it were something complete in and of itself. It is not. The experience is the proper functioning of both elements (the how and the what), and unless there is this interaction, there is no experience.



"Experience" is something different from "experiencing." The latter is a sub-division within the former; experience being the larger and more comprehensive of the two terms. The experience is what has historically been called the objective aspect of nature. Dewey, however, wants to avoid any dualisms within the concept of experience.

The act of experiencing, for the purposes of inquiry, involves a deliberate omission of the what of experience. Generally speaking, one experiences things, not observations. But the act of observation may itself become a subject of observation (form a subject of study) as long as it does not become something distinguished, isolated, and abstracted. There is a tendency to place whatever is experienced as "out there," somehow independent of emotion, volition and the like. Likewise, historically, the self is poised as being separate from the objective, and it is this positioning of a separate self that Dewey calls subjectivism.

But, according to Dewey, simply because a state of observation (mental state) can become the subject of a study, it does not mean that this second state or subject is any indication of a metaphysical separation between object and subject or between physical and mental states. Certainly, the reflective process is capable of yielding a "self" that appears separate from other things, but it is a mistake to think this self has no connection to the primary experience. This was the error in the rise of subjectivism,<sup>15</sup> and

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<sup>15</sup> Ibid., p. 15.



the role of primary experience was negated, and as a result, a dualism was established between the objective and the subjective. As a result of this, there was a mental world established quite autonomous and separate from the "other" world. This mental fabrication was given the quality of "given" and the primary experience was regarded as something illusory and dubious.

Dewey gives us an example that might be illuminating on this point. This is how a subjectivist would explain an experience:

When I look at a chair I say that I experience it. But what I actually experience is only a very few of the elements that go to make up a chair, namely, the color that belongs to the chair under these particular conditions of light, the shape which the chair displays when viewed from this angle, etc.<sup>16</sup>

According to Dewey, there are two things wrong with this explanation of experience. The first is that experience is reduced to particular acts of experiencing, the act of seeing in this case. The qualities are posited over and above the experience and the qualities become the direct and immediate experience. Logically, the thing (chair) disappears and the qualities of the act of vision take its place. The "total" chair has disappeared! In the second place, in the above description, there is an object that is invented (the chair), that is something more than the direct experience. There is the chair that one looks at, the chair that has certain colors, the chair that has a certain shape, etc. Reference to

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<sup>16</sup>Ibid., p. 16.





these sorts of things becomes inevitable because these are the only things that are admitted to be experienced immediately. But, according to Dewey, reference to the qualities is only part of the experience, the HOW of experience. The WHAT of the total experience has been omitted altogether. The WHAT, of course, is the chair! For the subjectivist, there are only two steps in experience; the act of seeing qualities, and the making of these qualities primary objects of experience. In this regard, Dewey may be correct, for as I look out my window, I see trees and buildings, not green, round, brown, and square.

In the "genuine empirical method" there are various steps that take the place of the above two steps. One, there is the primary experience, the chair; two, there is a reflection on the experience (which is now called experiencing) which makes it an act of seeing, or I reflect that I am seeing; three, this act of seeing becomes an object of reflection and this object in turn is used to regulate further experience of the subject-matter that was contained in the primary experience. The important thing, according to Dewey, is that the experience was objective, not subjective, because it included the what as well as the how of the perception. The indication of the what of the experience, makes the experience objective. As can be seen, the difference between the experience and the experiencing is really only a matter of emphasis. This is the one important result of the use of the



empirical method: the realization of the importance of primary experience and the use of this experience in explaining what constitutes nature.

The most prevailing criticism of Dewey's notions of experience and nature is that whatever else it might be, it is not a descriptive empirical naturalism or naturalistic empiricism. Santayana claims the central problem is with the "dominance of foreground." The foreground in Dewey's theory is the immediate experience. According to Santayana, if a foreground becomes dominant, one no longer has a naturalism but a mystical religion or a traditional metaphysic. He says:

The idealists, being self-conscious, regarded this natural scene as a landscape painted by spirit; Dewey, to whom self-consciousness was an anathema, regards it as a landscape that paints itself; but it is still something phenomenal, all above board. Immediacy, which was an epistemological category, has become a physical one: natural events are conceived to be compounded of such qualities as appear to human observers, as if the character and emergence of these qualities had nothing to do with the existence, position, and organs of those observers. Nature is accordingly simply experience deployed, thoroughly specious and pictorial in texture. Its parts are not (what they are in practice and for living animal faith) substances presenting accidental appearances. They are appearances integrally woven into a panorama entirely relative to human discourse. Naturalism could not be more romantic: nature here is not a world but a story.<sup>17</sup>

And a human story at that. This is much the same criticism earlier offered that one person's perception, however immediate and reflective,

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<sup>17</sup> G. Santayana, "Dewey's Naturalistic Metaphysics," in The Philosophy of John Dewey, p. 253.



cannot constitute the whole of nature. For the sake of continuity, experience has to include everything that man transacts with. But since experience is such a minute part of natural transactions, the range of natural transactions has to be much more than that of experience. We may grant that the possession of a quality of immediacy is a characteristic of "experience," but Dewey claims that all natural existences have this quality.

What kind of "naturalistic empiricism" or "empirical naturalism" is this?

As far as "experiencing" and "experience" are concerned, it is most unfortunate that Dewey continued to use these two words throughout his writings. Historically, they conjure up too many metaphysical notions. Even Dewey at age ninety claimed that "The words used were most unfortunate: and wrote about "experience" that "historically so many different interpretations have been put on the word by philosophers that it is now too late to rescue it from ambiguity."<sup>18</sup>

Whatever else may have been gained from this short exposition of nature and experience, one should see the important role the metaphysical perspective plays in the total theory of inquiry.

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<sup>18</sup>J. Dewey, "Experience and Existence, A Comment," in Philosophy and Phenomenological Research, Vol. 9, 1948-49, p. 712.





## III

INTELLIGENCE

Again, I will attempt to give a clear exposition on Dewey's position on intelligence before attempting any form of analysis. Of all of Dewey's notions, "intelligence" has been tossed between critic and apologist more than any other. It is generally conceded that Dewey has at least two conceptions of intelligence. The first is biological with a stress on adaptation, while the second is "creative intelligence" with a stress on novelty and creativity. One might claim there is no difference between the two and that intelligence is both creative and adaptive. One might also claim the two notions are contradictory and are incompatible and even try to show that Dewey himself was unclear about the notion of intelligence. Perhaps a third stand would entail the notion that Dewey changed his mind as the years passed and that he moved from the adaptive to the creative notion in later years. This last alternative appears to be the more probable as the majority of the emphasis on adaptation is confined to Dewey's earlier works. For example, this came out in 1916:

The significance of the evolutionary method in biology and social history is that every distinct organ, structure, or formation, every group of cells or elements, is to be treated as an instrument of adaptation to a particular environing situation. Its meaning, its character, its force, is known when, and only when, it is considered as an arrangement for meeting the conditions involved in some special situation.<sup>19</sup>

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<sup>19</sup> J. Dewey, Essays in Experimental Logic (Chicago: University of Chicago Press, 1916), p. 93.



The significance of the above statement is that if mind is a group of cells, the functioning mind is viewed as an instrument of adaptation to the environment. The question is still there, of course, as to the nature of this adaptation. Is it a passive adherence to the pressures of the environment? Is it only the environment that changes the individual?

Dewey does not talk about the passive manipulation of one part of nature upon another. The individual does not simply affect the environment and the environment does not simply affect the individual. They must always interact and in a fashion where activity must always be involved. Some further quotes on this role of intelligence:

The pragmatic theory of intelligence means that the function of mind is to project new and more complex ends--to free experience from routine and from caprice. Not the use of thought to accomplish purposes already given in mechanism of the body, or in that of the existent state of society, but the use of intelligence to liberate and liberalize action, is the pragmatic lesson.<sup>20</sup>

and further:

Interactions go on anyway and produce changes. Apart from the intelligence, these changes are not directed. ...when an interaction intervenes which directs the course of change, the scene of natural interaction has a new quality and dimension. This added type of interaction is intelligence.<sup>21</sup>

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<sup>20</sup>J. Dewey, "The Need for a Recovery of Philosophy," in Creative Intelligence (New York: Henry Holt and Co., 1917), p. 63.

<sup>21</sup>J. Dewey, The Quest for Certainty (New York: G. P. Putman's Sons, 1960), p. 214.



and finally:

It is essential that adjustment be understood in its active sense of control of means for achieving ends. If we think of a habit simply as a change wrought in the organism, ignoring the fact that this change consists in ability to effect subsequent changes in the environment, we shall be led to think of 'adjustment' as a conformity to environment as wax conforms to the seal which impresses it.<sup>22</sup>

It is evident that intelligence is the directed interaction between man and his environment and that the resulting directed adjustment must involve change in both. This is the creative adaptation of the biological organism and is the position Dewey finally arrives at. Intelligence is the name for this directed activity.

Hand in hand with the explanation of intelligence is the concept of knowledge. The objects of knowledge were discussed in the last section and that discussion centered around how these objects were determined.

What we have established so far is that in order for an activity to be called a "knowing" process, there has to be (1) an activity, and, (2) that activity has to be directed adjustment with the environment. There is a third condition:

...the outcome of the directed activity is the construction of a new empirical situation in which objects are differently related to one another, and such that the consequences of directed operations form the objects that have the property of being known.<sup>23</sup>

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<sup>22</sup> J. Dewey, Democracy and Education (New York: The Macmillan Co., 1916, 1961), p. 46.

<sup>23</sup> J. Dewey, The Quest for Certainty, p. 86.



The immediate things we experience, of course, are not knowledge, they are simply felt or had. But the directing of these activities by intelligence will produce knowledge. Dewey calls these situations or primary events "problematic." This is an epistemological classification. The problematic situation is not a good or bad, difficult or easy one. Problematic has a neutral connotation to it. The problem will become difficult or easy depending on our attempt to analyse it and apply our intelligence to the situation. But in so far as events are expectant and are just had, Dewey calls them "problematic."

Historically, in order to achieve knowledge, one had to reach a degree of certainty, usually by arriving at some non-changing entity that one can secure and call knowledge. Dewey, of course, avoids all such searches and regards them as futile. The only legitimate quest is the quest for measures of control and direction. This in turn will lead to definitions from operations that are interactions. If there is to be any certainty, it will only arrive when we regulate the conditions of change in respect to their consequences; and only to that extent.

With this particular view of knowledge, Dewey wants to claim that several conclusions concerning validity are forthcoming. To be sure the test for validity is no longer finding ultimate qualities in ultimate real objects. Rather, the test for validity becomes one of "function." Validity is functional because it makes possible the institutions of interactions that will yield control of actual experience, of actually observed events.





One thing the experimental method does do, is that in the search for control, objects have to be reduced to data and experience things temporarily lose their qualities. Otherwise, there could be no pointing to, no directing or controlling of one experience over another. Likewise, with concepts and ideas, they are designations of operations to be performed (or already performed as the case may be) but they cannot be controlled from the present, as they are being had. The pointing to is always in the past or anticipated. The value of these operations is thereby determined by the outcome.

Dewey is trying to claim that no distinction should be drawn between knowledge and action. He phrases it this way:

Ideas that are plans of operations to be performed are integral factors in actions which change the face of the world. Idealistic philosophers have not been wrong in attaching vast importance and power to ideas. But in isolating their function and their test for action, they failed to grasp the point and place where ideas have a constructive office. A genuine idealism and one compatible with science will emerge as soon as philosophy accepts the teaching of science that ideas are statements not of what is as has been, but of acts to be performed. For then mankind will learn that, intellectually...ideas are worthless except as they pass into actions which rearrange and reconstruct in some way, be it little or large, the world in which we live.<sup>24</sup>

We can have ideas and thoughts apart from action; that is obvious, but they are null and void and have no relationship to knowledge. The test for validity can no longer be by reference to past knowledge that was intuitively grasped or simply assumed. Intelligence

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<sup>24</sup>Ibid., p. 138.



in action is to achieve knowledge which may very well be a changing, on going process. The only knowledge of the past that one can rely on, is the knowledge that has been attained by the method of inquiry; all other knowledge must be tested against the light of experience. Mental states and mental acts are, therefore, not objects of knowledge directly, but only through the actions that they invoke and direct. The consequences of the actions, therefore, become the objects of knowledge. It should be remembered that the name for the direction of these actions is intelligence.

Herein lies the key to Dewey's metaphysical notions. Herein lies the reason why experience, nature and intelligence are so readily united for Dewey. It is by the operation of intelligence, from experience in nature, that one arrives at knowledge. In this sense, the process of knowing is a real participant of the known. As a matter of fact, it is difficult to observe the difference between the two since the end (knowledge) is just an end-in-view, and the choice of stopping at any particular point is a choice dictated by the circumstances. But in this case, the object is never really different than the process to arrive at the object. One is in a constant state of arriving at knowledge, and this constant state is synonymous with the knowing process.

Dewey likens intelligence to the process of making a "judgment," as opposed to giving an explanation or giving a reason. One has



to make a selection or an arrangement of means to effect a consequence. A wise man, a man with practical judgment, is the man who can estimate the possibilities of a certain consequence and acts according to his estimate. One loses theoretically certainty, but, according to Dewey, one gains practical judgment. Intelligence has a foothold in nature in so far as there is a possibility of control over the direction of change. Intelligence works from within nature and is not looking at nature or from nature.

One is still perplexed over the relationship of the given events and the stage called knowledge. Just how does one go from a stage of had to a stage of know. What is the link? Is it mental structure? Is there an ego inside of me that is deciding which object to control, which to ignore? And even if I have decided that I wish to gain some direction and control over "X" event, what do I call upon to commence my analysis? Is it my previous experience? Is there no beginning?

It would appear that this judgment or intelligence has a metaphysical implication as well as an epistemological one. Dewey, of course, must avoid this. Thinking is a "response to the doubtful." The reaction to the problematic is therefore the definition of "mind." When the organism response to the doubtful as doubtful, it is Dewey's claim that the reaction or the interaction "takes on the quality of being mental." Dewey's word for the mental quality is, of course, "intelligence." Intelligence is, therefore, "directed response to doubtful."





This, of course, does not really explain anything. It is not clear whether intelligence is an "ego" or a group of actions. If there is a mass of givens (events), why do they not simply perpetuate themselves indefinitely? What is there to say that control and direction must enter into the situation? Is that not rather an added quality to any situation; added in the sense of it not being part of the given? It cannot simply come about from nothing. The organism must at least have the capacity to decide or make judgments. Dewey must avoid looking upon it as a capacity that an organism has, and at this point, Dewey is led into a psychological dimension to explain the phenomenon of judgment.

According to Dewey,<sup>25</sup> this conception of mental (that the quality of mental arrives when the doubtful is responded to as doubtful) brings out "modes of behaviour." The consideration of particular psychological modes of behaviour will be left for Chapter III, but it should be indicated here how these modes of behaviour affect intelligence. There are three modes of behaviour: emotional, volitional, and intellectual.

The most immediate mode of behaviour is emotional and this mode is simultaneous to the given events, it is the love, joy, hate, etc., that are part of the given. Dewey feels there is a built-in expectation that things will change. It is part of the given that things will change, that events come to us as expectant. This does not indicate direction of changes, only that things will change. The volitional is closely connected to the emotional,

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<sup>25</sup>Ibid., p. 227



but the volitional is the tendency of preference. That is, it is part of the behavioural structure for the organism to choose one thing over another, to emphasize one over the other. This phase or mode of behaviour is clearly the "will" or "ego" of choice. Both of these modes are direct and given, given as part of nature and given as part of being human. But the volitional has elements of indirectness to it. As yet, Dewey has not explained why life could not continue at these levels, having events and enjoying some, rejecting other (by choice) but having no control or direction over them.

The intellectual mode of behaviour is an indirect phase, that is, it is not something immediately had. The purpose of the intellectual mode is to search and locate the problems and then form some sort of conclusions to bring them to settled situations. By way of criticism, it should be noted, that this desire to solve the problematic is above and beyond the awareness of it. There is an added element to the explanation of how the intellectual phase takes place. If a search is conducted for data, if opinions are solidified, something more than just my perceptions are doing these things. Dewey has to deny a "mind" separate from my perceptions and modes of behaviour, but he has given all the functions of mind to these modes of behaviour. He says:

There is no separate 'mind' gifted in and of itself with a faculty of thought; such a conception of thought ends in postulating the mystery of a power outside of nature and yet able to intervene in it. Thinking is



objectively discoverable as that mode of serial responsive behaviour to a problematic situation in which transition to a relatively settled is effected.<sup>26</sup>

I am not sure why one must postulate something apart from nature, but I am sure that one would have to postulate something to account for change and direction. A "directed response" does not seem to be sufficient to account for what might be called intelligence. Unless this added mental quality "mystically" arrives at the point of the given problematic events, but then, that is not descriptive naturalistic empiricism.

It is not indicated whether mind is adaptive or creative and that is significant. Whether or not the intelligence is adaptive or creative is not an issue with the essence of intelligence for Dewey, only that it be serial responsive behaviour to the problematic. But Dewey almost has a pantheistic view of man's relationship to nature. One is so much a part of the event that there could not be one without the other. Something happens to one's individuality under this scheme and one becomes nothing more than what one eats, sees, and does. Perhaps idealistic tendencies lead me to conclude that Dewey is describing only a part of what man "is."

The general conclusions about intelligence, nature, and experience form the bases (metaphysical) for the development of the theory of inquiry. Inquiry is in fact, according to Dewey, intelligence at work. There is one further issue that needs

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<sup>26</sup>Ibid., p. 227.



consideration. Dewey's theory of intelligent behaviour is very closely tied to a theory of behavior and habit formation. Also, Dewey has tried to show how one can know the facts of a situation by the use of inquiry. That is, one should arrive at knowledge by the use of inquiry. But does having this knowledge (later called "warranted assertions") mean that I know what I should therefore do? Since I know what the fact is, does this tell me what I should do? This question has been asked by mankind since time began, but Dewey has to deal with it. He has told us that if we do inquiry correctly, we will all have the same answers. How is this possible? One possible answer might be contained in the psychological perspective that Dewey presents. His biological orientation and the search for an answer to the above question, indicates that a chapter on the psychological perspective is in order. This will follow.





### Chapter III

#### THE PSYCHOLOGICAL PERSPECTIVE

It is taken for granted that the notion of habit is closely linked with the notion of activity. When one thinks of bad habits, one often conjures up notions of an overpowering force or will that directs one, and naturally, the concept of emotion is seen as closely connected to this concept of habit. However, when envisioning activities like walking and talking, there is a tendency to think of any related habit as a capacity that the individual has, quite apart from any compelling emotional force. But in either case, the habit is viewed as something that is held in reserve until used. The above explanations, however, have little to do with John Dewey.

According to Dewey, we are the habit. There is no entity that develops habits or has a habit. A habit is an affection with a projectile force which is formed by numerable specific acts, and these, in turn, bring forth general dispositions of behaviour which are far more powerful in activity than any mere conscious choice. Habits are demands for activity, they constitute the self and the will of the individual. The habits are our desires, our capacities and our method of thought, even to the extent they dictate our convictions, what we revere and what shall be passed



on to succeeding generations. Without organization of such capacities, the eyes see nothing and the hands do nothing. These organizations are called habits.<sup>1</sup>

A habit, whether good or bad, is a positive, forceful mode of activity. They are, in a sense, integrated ideas, and because of this integration, they are ideas which will prevail. A pure idea or thought, apart from habit is incapable of directing action. As a matter of fact, Dewey claims that pure thought or reason, separate from action or the influence of habit, is impossible.

One will always admit that there is a certain dependence of reason on prior experience; but Dewey claims that reason and the essential elements of ourselves are habits. Hence, the seeming heavy emphasis on the psychological elements in his theory of inquiry. Our thoughts are directed and controlled by the particular habits which have been developed by specific acts. "The medium of habit filters all the material that reaches our perception and thought."<sup>2</sup>

Since man is a social being, one's conduct cannot be isolated from the social functions. There is an intrinsic inter-relationship between the habits (conduct) of the individual and his environment. Dewey draws a comparison between habits and functions like breathing. Of course, breathing is not learned

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<sup>1</sup>J. Dewey, Human Nature and Conduct (New York: The Modern Library, 1922, 1950), p. 26.

<sup>2</sup>Ibid., p. 15.



and habits are, but the habit functions in the society in the same way the air and the lungs operate. The one involves the other, the one functions with the other, and so it is with habits and society.

Dewey claims:

Honesty, chastity, malice, peevishness, courage, triviality, industry, irresponsibility are not private possessions of a person. They are working adaptations of personal capacities with environing forces. All virtues and vices are habits which incorporate objective forces. They are interactions of elements contributed by the make-up of an individual with elements supplied by the out-door world. They can be studied as objectively as physiological functions, and they can be modified by change of either personal or social elements.<sup>3</sup>

According to Dewey, our habits do not become latent, then active, then latent again. All of our habits are functioning, to some extent or other, as the human organism is functioning. Dewey calls this "interpenetration of habits," our character. Our environments overlap, situations are continuous and there is a continuous modification of our habits. Character is the unity of these habits or, more correctly, the unity of the interactions of the habits is character. The essence of habit is not simply routine, although there is repetition involved in habit formation, but the essence is not just routine. What then is the essence of a habit? And, what constitutes a habit?

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<sup>3</sup>Ibid., p. 42





The essence of a habit is an acquired predisposition to ways or modes of response, not to particular acts except as, under special conditions, these express a way of behaving. Habit means special sensitiveness or accessibility to certain classes of stimuli, standing predilections and aversions, rather than bare recurrence of specific acts. It means will.<sup>4</sup>

The organism is, among other things, a mass of activity. The activity that is directed, organized or represents a mode of behaviour (not the specific act) is, therefore, what Dewey calls a habit.

Habits play an essential role in society as well as with the individual. When habits become "widespread uniformities" they are called "customs." Customs are not the consolidations of "social" habits, for there is no "society" above and beyond the individuals or prior to the individuals. The customs will be passed on from one generation to the next by the individuals in that society. If the prevailing customs get passed on in an inert, stupid manner, the society will be rigid; even to the extent that the method of inquiry will be difficult to pass on to the next generation.

In any educative process, one must not think of the young as jars to be filled with stocks of information that we as adults have accumulated. The habits that are passed on to the youth should not be used to guarantee the maintenance of the constrictions that already exist in the society. It also appears that habits

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<sup>4</sup>Ibid., p. 42.



and customs can be changed, and as well, that there are some habits that should be passed on and others not. These questions shall be taken up later in the chapter when considering instinct and the particular habits of reflection.

The point Dewey wishes to emphasize is that unless the habits of reflection are deliberately instilled in the young, the mindless regime of custom will sweep the young forward in mindless repetition of the past. This is an interesting comment, for it suggests that the habits of reflection are quite natural. If it is so natural, one wonders why it is so difficult to pass on the habits of reflection from one generation to the next, and why it simply does not emerge in all societies. But one must also avoid the notion that habits are an entity of any kind. They do not reside in the individual, nor do they "do this and do that," nor do habits make us do this and that. Dewey sometimes falls into this language usage himself, but theoretically, he wants to avoid it. Habits do not replace the "will" metaphysically speaking, the will is simply the predisposition to modes of behaviour.

Habits are acquired rather than native and original. The native, original "stuff" is what Dewey calls impulse or instinct. Impulses are secondary and dependent. They are secondary because they only exist for a short time and they are non-directional. They do not lead activity, but they do initiate activity. Impulsive or instinctive activity is random movements without any meaning. It is habit that allows an impulse of activity to continue and take on meaning.



The meaning of any activity is, therefore, learned, it is not innate, and the particular development of any organism is dependent on the surrounding social medium and the interaction with that medium. Any impulse can be channeled into any habit. According to Dewey, this is brought out by the fact that all human beings have the same impulses but many different forms of habits and social customs exist in the world. The differences are due to learned behaviour.

However, impulses do play a very particular role in connection with habits.

Impulses are the pivots upon which the re-organization of activities turn, they are the agencies of deviation, for giving new directions to old habits and changing their quality.<sup>5</sup>

It appears that the role of impulse or instinct is to be the pivot of re-organization and re-structuring of old habits. In one sense, human society is always starting anew with every birth. It is the constrictions placed upon the new by the old that produces a somewhat similar society to the one already established. This is where education plays an important role. For the most part, the passing on of habits and customs from one to the next is unconscious. It was only with the development of the notion of the betterment of mankind that a deliberate effort was maintained to pass on to one generation what the other generation considered valuable.

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<sup>5</sup>Ibid., p. 93.



Education, therefore, consists "of an intelligent direction of native activities in the light of possibilities and necessities of the social situation."<sup>6</sup>

On the whole, the young are not intelligently led, they are trained rather than educated, according to Dewey. They are forced into a complacency wherein they are not invited to look critically into the customs and habits of the older generation. One indicator of intelligence among the youth is to question--regardless of the answers. But, the original modifiability is misused to stamp conformity on the young. This in turn, hinders any changes that are attempted later in life. Can this original modifiability be changed after it has been set? According to Dewey, yes. Traditionally, mankind has appealed to a form of conservatism which implied there are some basic human instincts that are unalterable. On the other hand, there were some so called radical writers who proclaimed that the mind or human nature was a blank sheet at birth and only the environment directed the individual and, in that sense, education was omnipotent to render any form of society imagined. According to Dewey, they were both in error. However, it is not easy to change customs or manipulate habits, but it can be done.

There is a manifest difference between apparent social change and real social change. The beliefs, attitudes, dispositions of

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<sup>6</sup>Ibid., p. 97.





the people, in general, are not easy to manipulate. The various institutions may change, such as a certain law or the operation of an organization, but the habits that help develop the first institutions will be much slower in changing. A change in the institutions or outward organizations in the environment is an example of apparent social change. When the actual customs themselves change, then real social change has taken place. The habit, in fact, may try to outlive the actual behaviour pattern or the specific institutional change.

Nonetheless, habits can be altered. The alteration may take place over an extended period of time, or, in the case of customs (i.e., "widespread uniformities), over several generations. Those who claim that some of our socially accepted habits are natural (for example, competition), are, in fact, wrong. They can be changed but only with perseverance and time. Under Dewey's scheme, all types of changes are possible, even, for example, the habit of "war." All one would have to do is to eradicate the habits like anger, pugnacity, rivalry, self-display, and the like. Dewey is absolutely right in that some changes may take generations to accomplish. It is important to note, however, that actions and habits like pugnacity, self-interest, etc., are not native any more than love, sympathy, or pity. All of these activities interact with one another for longer periods to produce certain customs. Thus, change in any given society will involve change in their institutions, the individual habits, and the manner in which they



interact in the society. Then and only then will real social change take place.

By way of comment, it should be noted that Dewey's explanations are somewhat circular in nature. In order to change the society we have to change the individual and the institutions; but, in order to change the individual and the institutions, we have to change the society. Dewey might try to save the circularity of this explanation by the inclusion of intelligent thought. That is, by the use of intelligence, we can determine what we should be doing and then try to bring it about by controlling and directing the environment. The inclusion of intelligence, however, does not save the situation, for intelligence is just another form of habit that has to be learned. Intelligence is not entirely outside the system to initiate change. It seems we have to have at least one person who can change on his own in order to facilitate change in the society at large, and Dewey does not explain how this is possible.

The exposition so far has laid the foundation for an evaluation of the role of intelligence in conduct. In order for the intellect to operate effectively, certain conditions must prevail. These conditions are habits and customs. They affect the intellect in two ways. The first is by way of restriction. Habits restrict the reach and fix the limits of the intellect. They confine the train of thought and prevent the intellectual process from wandering. Habits can also be such that they stifle the intellectual process



and the person becomes confined and narrow. In the extreme, habits could lead to blind obedience. However, the habits of restraint are in some ways also necessary to lead the individual to the end-in-view.

Habits affect the intellect in another fashion. The negative limits mentioned above are only possible because the habits initially are positive conditions or agencies. According to Dewey, the more numerous our habits, the more flexible are our observations and perceptual discriminations. As we produce habits of action in one area, our perception becomes keener and we act intelligently in that area. Thus, the pilot acts intelligently in his area, the carpenter in his, etc. This observation is rather commonplace, but for Dewey it means:

...nothing more or less than the habits formed in process of exercising biological aptitudes are the sole agents of observation, recollection, foresight, and judgment: a mind or consciousness or soul in general which performs these operations is a myth.<sup>7</sup>

It means that the controlling factor of habit on intelligence is that intelligence is a habit. Habits do all the recognizing, perceiving, judging, reasoning, and imagining to be done, although one has to be careful at this point not to replace the word "habit" with "mind" or "soul." Habit itself, does not know how to think or see, nor is it a separate entity which sits back as the "captain of the ship."

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<sup>7</sup>Ibid., p. 176.



It is difficult to avoid this analogy, however, as Dewey makes constant reference to the fact that habits dictate the responses, habits allow us to perceive this, etc. Even though Dewey does not want a separate mind, the habits carry out the identical functions. Dewey has not shown how the difference could be a real difference and not just a verbal difference. There is one function that is lacking from the list of what the habits can perform. Habit does no reflecting upon itself. Dewey's response to this anticipated criticism is that habit is too controlled for that! Impulse does no reflection as that is just action let go. So where is reflection?

Dewey defends himself by claiming:

...that in every waking moment, the complete balance of the organism and its environment is constantly interfered with and is constantly restored. Hence the 'stream of consciousness in general....'<sup>8</sup>

According to Dewey, life is a series of interruptions and restorations. With each interruption there is awareness; with each restoration there is a return to the habitual, which is newly formed through restoration and reconstruction. This jumping into and out of "harmony" in life's experiences is called "being conscious" or "reflection on self." Self-reflection, then, is the brief intermediate state that occurs during reconstruction. If there is too much breaking up and not enough reconstructing, the organism ceases to function as such. Fortunately, the environment remains

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<sup>8</sup>Ibid., p. 179.





stable enough (mathematical-mechanical order) or harmonious with the activities of the organism, that active function is sustained. Impulse directs the organism during this heightened period of consciousness (the transition period) since habit has been temporarily set aside. Because impulse is too non-directive to indicate any specific action, the impulses direct only in very general modes. In one sense, according to Dewey, impulse supplies the force, while habit supplies the content. Finally, as new habits are formed or rather, as new actions are envisioned and take place, problems become clarified. This total function is another name for intelligence in action. Without habit, only confused and irritated impulses exist; if habits become extremely dominant, only machine-like repetitions exist.

Reflections, therefore, takes place when disorganization occurs or, to be more accurate, reflection is the name of the disrupted moment in the stream of consciousness. The organism becomes aware of itself that it is not functioning as usual. Impulses begin to appear and old habits begin to shake. The individual determines where he was prior to the disruption, and by looking ahead he determines behaviour related to his proposed course of action. The momentum of the activity persists and a sense of direction is fulfilled. That is, the individual recollects, observes, plans, and reflects.

The immediate sensation of consciousness is an element of action, according to Dewey, that is being precipitated through



interruption. Consciousness never monopolizes the entire scene because past perceptions would cease to have any meaning if the present continued indefinitely. Thus, it is possible, out of a state of disorder, for a pattern or framework to emerge which represents the past, present, and the anticipated future. The scene presented to us is, of course, wholly dependent on past habits and their organization. Consciousness is this process rather than an impetus for action.

Dewey admits that this is a strange view of the psychology of man. It does overcome, in his view, a number of problems that have traditionally been with the philosophers. The main issue for Dewey is the traditional problem of the role and place of knowledge. A separate organ of knowledge does not exist independent of action and behaviour. Habits are impeded, conflicts arise, and impulse is released. In this indeterminate state, impulse directs activity which is the "prospective character of knowledge." In this state, the individual strives to find unity and order so that a consistent environment will be restored. At this point, his unity is only perspective of what may happen. Knowledge is the condition that acts as guide or control of what is to be mastered. From the intermediate state and with the impact of old habits and impulses, new action is formulated and executed. New habits are thus formed.

Dewey would like to define consciousness as a mode of behavior. This effort has a number of problems connected to it. Consciousness, as Dewey has used it, appears simply to refer to a



lack of continuity, which is difficult to label as a mode of behaviour. When organisms are in a state of dis-function or confusion, Dewey calls this self-reflection. In this case, it is not the starting point of reflection, it is reflection, or deliberation. It seems odd that one of the more important concepts in the theory of knowledge is nothing more than a relationship of disunity. As a result of this as well, reflection or deliberation is not something (habit) that can be learned. It is simply a name given to a state when the organism is in disunity.

There is another interesting point in the process discussed above. During the state of disunity (consciousness, reflection, deliberation), the individual strives to find unity. Who is this individual? It is not habit as that has been set aside; it is not impulse as that is non-directive for anything but general activity, and it certainly is not consciousness as that is just a name for a non-functioning state. What is it that provides the impetus for unity? Dewey does not answer that question.

Israel Scheffler has also brought up another criticism that I think is well worth noting.<sup>9</sup> It goes something like this. Dewey continually stresses the fact that inquiry or the reflective method needs to anticipate in the moral view, and avoid the point of breakdown of directed activity. That is, reflection is a matter of reconstruction. However, from the psychological point of view,

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<sup>9</sup>I. Scheffler, Four Pragmatists, A Critical Introduction to Peirce, James, Mead, and Dewey (New York: Humanities Press, 1974), p. 224.



one needs a breakdown before one can start reconstruction. However, if the organism is still functioning, how can any reconstruction take place? The reconstruction of our habits can only take place after the current habits have become impeded. How then can one use foresight to anticipate whatever problems may in the future come about? Impulse does not reconstruct or revise habit that is currently functioning. (Therefore, foresight is not possible.)

Dewey may try to counter this suggestion by claiming that the perception of the need for foresight or looking ahead suggests a problem to the organism, and that would constitute the problem to be dealt with. But Scheffler's point is interesting because it does show that thinking can only start if there is a problem. This point will be dealt with in later chapters.

I now wish to discuss the particular habits that are required for a successful inquiry. Dewey has indicated that unless the method is carried out in the right fashion, no successful inquiry can be accomplished. One must, therefore, look at the "right method" to carry out inquiry. It, of course, involves having particular habits of inquiry along with the development of some natural instincts.

Since the attitudes or habits are learned, the role of education becomes very important. Within the schools of education there has been a traditional problem between process and product. The concern has been with the manner to establish a thinking or a logical person. That is, does one look at the product in order to







establish a logical mind or do we look at the process or any combination thereof? At one end of the spectrum are those who would claim that logical form only belongs to the product, that the mind has no natural logic and, therefore, the logic had to be stamped into the mind in order to make the mind logical. The mottos, according to Dewey, that were appealed to were "rigour," "discipline," "formalization," and the like.

The extreme reaction to this school was to view logic as an artificial contrivance. Their ideal was to give free reign to the individual so that he might express any existing attitude and habit. There is an appeal to natural tendencies, but no concern for control and direction. Both schools seem to follow the direction that mind is naturally alien to logic, with the latter school expressing slogans like, "freedom," "spontaneity," "play," "interest," "individuality," and the like.

The error of the two schools are the same, according to Dewey. They deny or ignore the fact that there are natural, innate tendencies for the mind to be reflective. There is an innate tendency to draw inferences, experiment and test. The mind at every stage has its own logic. The teacher who is alive to this fact will have no problem avoiding the identification of logical with an external form, nor will he fall into the trap of not paying any attention to logic at all. The good teacher will see that being logical and the psychology of a person are not in opposition to one another. The good teacher will see that the



psychological is the beginning of a process and the logical in the end of a process.

The psychological processes in being logical are threefold: open-mindedness, wholeheartedness, and responsibility. I shall take them in that order. The core of this information is from How We Think.

Open-mindedness is the first desirable attitude or habit, and it is defined as "...freedom from prejudice, partisanship, and other such habits as close the mind and make it unwilling to consider new problems and entertain new ideas."<sup>10</sup> For Dewey, open-mindedness must not be the same as empty-mindedness. Open-mindedness is having a point of view, but expressing a willingness to listen to the other side and be active in the sense of giving full attention to other possibilities. This consideration of the other side must be done in light of the fact that the new information may provide a means to reconstruct one's present position. A passive mind will accept everything and a closed mind will accept nothing. Both are wrong. The happy medium is the correct view of open-mindedness.

The second attitude is called "whole-heartedness." This is the process of throwing oneself into the subject, of concentrating with the thing at hand and not allowing diversions to take him off

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<sup>10</sup> J. Dewey, How We Think, A Restatement of the Relation of Reflective Thinking to the Educative Process (Chicago: Henry Regnery Co., 1933, Gateway Edition, 1971), p. 30.



the pursued subject. In general, this attitude can be called genuine enthusiasm. When one is absorbed in one's material, the ideas flow spontaneously and the material itself will afford the impetus to converge on the attainment of a solution to a particular problem.

The third attitude is "responsibility." This refers to the willingness to follow through wherever the consequences of an inquiry leads one. It is the intellectual honesty that allows for the consistency of one's thought patterns and actions. One has to be committed to the consequence and this will promote understanding of the end-in-view. This is the process of taking the inquiry through to the end.

It should be pointed out that these attitudes are necessary for the inquiry method, but they are not sufficient. In fact, according to Dewey, these attitudes represent the essential characteristics of a readiness to accept ideas and carry them through to a conclusion. People can and do think in this manner on specific matters, but Dewey would have us think in these patterns in general, about everything.

It appears one has to achieve the right balance of open-mindedness, whole-heartedness, and responsibility. It is unfortunate that this balance is never explained. We can understand what it means to be at the extreme, for example, close minded or empty-headed. There are concrete examples to be given of each.



But what is this point in the middle that represents the ideal? Do we have an example of what it means to be just the right amount of open-mindedness? I think not. Dewey can only give us a range of what might be acceptable open-mindedness and then that will have to be determined by the situation at hand. There really is no such thing as being open-minded, etc., per se, but these can only reflect general attitudes that would promote the inquiry. But Dewey wants to give them more force than just an emphasis. They are for Dewey, necessary requirements of thought. If they are that necessary, one would have hoped for a more concrete description of just what they entail. Dewey fails to give us those concrete descriptions or examples.

If we are going to consider the development of the logical process or method of inquiry, we must also consider the native tendencies from which these resources can be developed. Dewey is claiming that all normal people will have these tendencies and it will be dependent upon the nurture that one receives as to whether or not these native tendencies survive in any given person. It is not at all clear just what these native tendencies are, for they are not impulses as they are too non-directed to include specific actions; and, it is not habit either for that is learned behaviour; and the native tendencies are innate. All Dewey says is that they are the germs from which habits of reflection can be developed.

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<sup>11</sup>Ibid., p. 35.





The first of these tendencies Dewey calls "curiosity." Now it already has been established that everything that is alive is in constant interaction with its environment. The individual gives something to the interaction and he gets something in return. The name for this interaction is, of course, "experience." As children, we all have a tendency to use our senses to the utmost capacity, we are far reaching, we seek new ways, etc. These natural actions Dewey calls "curiosity." There are three levels or modes of curiosity.

The primary stage of curiosity is not to be associated with the thought process in any way. It merely represents an uneasiness, a desire to get into things, but for no reason at all. This is just overt action in any and all directions; fumbling, handling, touching, looking, are some examples. This level is called the organic level of curiosity.

A higher stage of curiosity soon develops, however. This is due to what Dewey calls the "social stimuli." Children proceed to ask questions "Why?" and "What is this for?", without really expecting an answer to the question, at least in a rational fashion. The curiosity of this stage is more developed than at the organic level because some direction is being instituted. The germ for intellectual curiosity is laid at this level and it is called "social curiosity."

The final stage is where real intellectual exploration takes place. This is the intellectual stage where curiosity leads one to



seek answers that connect events, that bind them together and give them meaning. Habits like flippancy, indifference, and laziness would all hinder this level of curiosity.

The problem is still with us that these native tendencies are very much like predisposition to certain modes of behaviour. They are habits, especially in light of the fact that other habits will impede them. One can learn to be like this (curious) or one could not learn. By calling curiosity innate, Dewey may be trying to save the notion that logic is a natural development of the organism. I see no compelling metaphysical or epistemological reason why curiosity could not be just another habit. In the end, it must certainly be exercised as a habit or it would have no direction or meaning whatsoever.

"Suggestions" are the second natural tendency. No one can stop ideas from coming to mind. We can direct the ideas but we cannot stop them for any extended period of time. Dewey says:

Ideas in this primitive and spontaneous sense, are suggestions. Nothing in experience is absolutely simple, single and isolated. Everything experienced comes to us along with some other object, quality, or event.<sup>12</sup>

The relationship between ideas, suggestions, and perceptions is not clear. I will leave off any discussion of the difference till the chapter on Inquiry, for it fits into that section better than at this point. It appears, however, that when an idea comes to

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<sup>12</sup>Ibid., p. 41.



mind, this idea in turn suggests another idea. One is led to think of other things that are related either directly or indirectly. The process is called suggesting. The suggestions come in complex groups and are not single and separate.

Before discussing the dimensions of suggestion, it may well be pointed out that suggestion takes on the same quality within the individual as the "expectancy of events" does in nature. Events come to us as expectant and that is a metaphysical quality of nature; now suggestions come to mind to lead us to other ideas, and that appears to be a native state of the individual. More will be said of this when we discuss the operational nature of facts in Chapter IV.

Suggestions flow forth, unhindered and unaided by the individual, and yet, there are tendencies within the individual that allow for more or less suggestions in a more or less suitable fashion. This "suitable fashion" is called a dimension. There are three dimensions of suggestions. They are: (a) ease, or promptness; (b) range, or variety, and (c) depth, or profundity. I shall consider them in that order.

The dimension of ease, or promptness, is what Dewey calls a bright mind or a dull mind. The dull mind is one when the suggestions are not forthcoming with ease, and in general, the quicker the response, the brighter is the intellect. The second dimension is range, or variety. This is intended to be something quite different than the ease dimension, for regardless of how



quickly the suggestions flow, they either come as a flood or a trickle. This refers to the range or variety of the suggestions. Too few suggestions would indicate a weak mental habit; too many suggestions have too many alternatives for the individual to handle, and he may not reach any appropriate solution. One should have an appropriate number of suggestions to fit the situation at hand.

The third dimension of suggestions is their depth or profundity. This refers to the intrinsic quality of the suggestions. This is not intrinsic in any sort of metaphysical sense, it only means that the suggestion is relevant to the situation at hand.

The same general comments can be made about suggestions as were made in connection with curiosity. Dewey seems to be talking about habits as well as some quality that is neither habit nor impulse. The balance point is difficult if not impossible to determine, that is, when one has enough suggestions, too fast or too slow, are all issues that seem impossible to decide as the suggestions are flowing. For example, how does one tell if the suggestions that are coming to mind on a particular problem are relevant to the solution of the problem at that point? After inquiry and after the solutions have been reached, one might be able to decide if the suggestions were profound, but how does one tell that just when the suggestions are flowing?

The last native tendency is that of "orderliness." According to Dewey, all thinking processes that are going to be valuable over





and above the general stream of consciousness, has to be directed and guided. The ideas must fit into a pattern or an association that allows one to seek and find an appropriate conclusion. It appears that one needs a flow of suggestions, not too fast and not too slow; not too many and not too few; and in an order that leads them to a conclusion, in order to have reflective thought.

The connection between the psychological perspective and the theory of inquiry should be obvious. The entire structure of the human organism is viewed in such a fashion that inquiry cannot help but take place. In the last chapter, a question was noted as to how one would move from the facts of a situation to what should be done. Dewey has attempted to show us that if a person had all the qualities that he should have, inquiry that was successful would result. I do not think he has been able to show clearly that would be the case. There are still gaps between the had and the known, between one who knows and the one just functioning, between habit and logical thinking. The entire notion of the impetus for directed action still remains unanswered. According to Scheffler:

It is difficult to avoid the conclusion that Dewey's psychological views are incapable of adequately supporting his moral advocacy of continuous reform based on a rational prevision of the consequences.<sup>13</sup>

Let us now turn to the theory of inquiry itself.

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<sup>13</sup>I. Scheffler, Four Pragmatists, p. 226.



## Chapter IV

### THE PATTERN OF INQUIRY

For Dewey, the "scientific method of knowing" is the Logic, as the canons of inquiring with which logic is concerned emerge from fruitful ways of inquiry, when these ways (or habits) are formulated.

In order to analyse and examine Dewey's theory of inquiry, it is necessary to trace in some detail Dewey's formulations of this general pattern of inquiry. Here we intend to follow his technical and elaborate formulation of this general pattern as given in Logic: The Theory of Inquiry. The two earlier formulations will be briefly mentioned in order to show the subtle differences, but our main concern will be to deal with Dewey's last and most detailed explanation.

As was mentioned in Chapter I, the How We Think version of the inquiry method starts with suggestions, where the flow of ideas begin to come to the individual. The problematic situation itself was at that time considered to be a part of the environment, and was, therefore, pre-reflective. In Democracy and Education, the first step was "perplexity, confusion, and doubt"; this was still part of the situation, but the individual was now so involved in the situation that the perplexity involved both the environment and individual. The second step in How We Think was the



intellectualization of a particular problem from the general problematic pre-reflective stage. In Democracy and Education, the second step was a "tentative interpretation of the given elements," which may be the same thing as defining the problem at hand. In How We Think, the third step is definitely the formation of a hypothesis, but in Democracy and Education, the third step is only laying out the alternatives, not the selecting on any one of them. The fourth step in How We Think is reasoning in the narrow sense, where one goes over the selected hypothesis to ensure that it is right. In Democracy and Education, the fourth step was the formation of the hypothesis and making it more precise. The last step in How We Think was the testing of the hypothesis as it was in Democracy and Education.

The differences of these two versions are brought out to show that Dewey did go through a transition period where he changed his formulation of the inquiry method. In order not to duplicate the analysis and criticism, I will leave most of these considerations for the version in Logic. It is interesting to note that the problematic situation only later becomes a necessary part of the reflective method. This may be due to the fact that the full development of the metaphysical structure (Experience and Nature, for example) came at a later date. Certainly Dewey had the beginnings of the metaphysical ideas earlier, but the full development and its relationship to inquiry did come after mid-twenties with



the publication of Experience and Nature. This also shows the gradual development of what Dewey referred to as a "system of philosophy" (Chapter I). He was committed to such a development.

In Logic: The Theory of Inquiry, Dewey claims that inquiry is:

...the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole. (pp. 104-05.)<sup>1</sup>

This is what inquiry is to perform and it needs some careful analysis. The function of inquiry is to change situations, that is, in an existential fashion. What is a situation? It is not a single "object or event" as we never form judgments or decisions about objects alone, but in "connection with a contextual whole." (p. 66.) It is this contextual whole, that Dewey calls "situation." The situation is the "field in which observation of this or that object or event occurs." (p. 67.) This may indicate what Dewey means by a situation, but it does not clear up any problems. A situation may be cut down to my experience, and that in turn, to my experience now. But this situation to be recognized as such has to fit together as a whole with meaning and continuity, otherwise there will only be isolated events. Isolated events are not

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<sup>1</sup>All quotations in this chapter are from J. Dewey's, Logic: The Theory of Inquiry (New York: Holt, Rinehart and Winston, 1938), unless otherwise stated. The page numbers will be given after all the quotes in the text.





situations, therefore, one may ask what an indeterminate situation would involve, since the events must be given meaning and order to make them a situation. For the original situation to be a situation, it must be a unified whole to start. Dewey claims, however, that the purpose of inquiry is to develop a unified situation. There is some ambiguity involved here, but it will be discussed in greater detail at the end of this Chapter.

Dewey's explanation of the indeterminate situation is where "the constituents do not hang together." (p. 105.) This is a metaphysical reference and indicates that he is talking about the collection of events that one might refer to as a situation. The intent of inquiry is to take us from the indeterminate situation to the determinate and the means to do this is "discourse, through the use of symbols." (p. 105.)

#### I. The Antecedent Conditions of Inquiry: The Indeterminate Situation

The indeterminate situation is a pre-step in inquiry, that is, it is pre-intellectual, but it is "the necessary condition of cognitive operations or inquiry." (p. 107.) It is the very nature of the indeterminate situations that they "invoke the questionable," so as to be "uncertain, unsettled, disturbed." (p. 105.) This quality pervades "the given material" that constitutes a situation. The quality not only has the characteristic of invoking inquiry, but it also has the quality of exercising "control over its special



procedures." (p. 105.) The indeterminateness or unsettledness has to have this form of control "otherwise, any one procedure in inquiry would be as likely to occur and to be effective as any other." (p. 105.)

One should also be clear that it is the "situation" itself that has the qualities. The individual becomes unsettled or doubting because the situation itself is "inherently doubtful." According to Dewey, however, an individual's doubt may or may not always be related to a doubtful situation. There are pathological individuals whose doubts do not refer in any way to any actual existential occurrence, and there are those who doubt everything, even the settled condition. So it is not just in a subjective sense that the situation is doubtful. But, it must at least include the individual's doubt because the biological condition is part of the "antecedent existential condition." The transformation can only take place when the existential issue is taken care of as well as the individual's biological condition. The important point is that the stress for change in the indeterminate situation cannot simply take place in the biological condition, or the individual's particular state of doubt.

According to Dewey, even if the existential conditions were completely determined "in and of themselves," that is, as a situation, the "significance" of the situation could be indeterminate. (p. 107.) If the situation is "confused" then "its outcome cannot be anticipated";



if it is "obscure" then "its course of movement permits of final consequences that cannot clearly be made out"; and if "conflicting" then the situation "tends to evoke discordant responses." (p. 106.) So even if the situation is settled in an existential fashion, the meaning and significance of it may not be. Whatever be the nature of the interaction in an indeterminate situation, there must always be an existential consequence that is anticipated. There must be a felt need for change in the environment.

## II. Institution of A Problem

According to Dewey, the indeterminate situation is "the necessary condition of cognitive operations or inquiry." (p. 107.) In effect, the first step is to observe that the situation needed inquiry to lead it to a settled condition. The next step is the determination of what the problem is in that situation. It is not the problem that causes inquiry, for at the point of determination of the problem inquiry has already commenced. The determination of the problem is the result of the effort made by the organism to lead the unsettled to the settled. There must be the recognition of a problem because "without a problem, there is blind groping in the dark." (p. 108.) The nature of the problem is conceived when some suggestions are accepted and some others rejected. It appears that if we choose different suggestions, we could have different problems, but it is not clear how the indeterminate situation becomes, in fact, a determinate problem-situation. The indeterminate situation is non-cognitive and



non-intellectual. It is only "felt" or "had." The first step of intellectualization appears to be when one recognizes the situation as a problem. It is not stated how this is accomplished, only that "the first result of evocation of inquiry is that the situation is taken, adjudged, to be problematic." (p. 107.)

### III. The Determination of a Problem-Solution

Unless the particular problem mentioned in step two has the qualities of a situation and the possibility of a solution, the problem will have no meaning. The solution to the problem will come to us as an idea, as a means or condition for the solution of the particular problem. The more detailed the problem is outlined, the nearer the inquiry is to solution. We may, of course, make mistakes as to the exact nature of the problem or we may be proceeding on the wrong track. To miss the genuine problem is, of course, to miss the chance of genuine inquiry. But assuming that one can at least come close to the genuine problem, Dewey still has the problem of showing "How is the formation of a genuine problem so controlled that further inquiries will move toward a solution?" (p. 108.)

The first step appears simple enough: "...to search out the constituents of a given situation which, as constituents, are settled." (p. 108.) The indeterminate situation cannot be wholly indeterminate as there would be no meaning in the situation. Therefore, the first step is to determine those parts that are determinate





and identify them. Dewey gives the example of a fire alarm in an assembly hall. Some of the constituent parts of the situation are fixed and determinate; the fact that the fire is in someplace, the location of the doors, etc. These are "the facts of the case," the "terms of the problem." (p. 109.)

The second step is not quite so simple: "A possible relevant solution is then suggested by the determination of factual conditions which are secured by observation." (p. 109.) The solution "presents itself" as a way to transform the indeterminate situation to a determinate situation. This solution presents itself as an "idea." This idea comes forward in exactly the same fashion as the facts came forward within the observation. These ideas are "anticipated consequences" to the operations to be executed. There is a correlation between the facts that arise because of observation and the ideas that arise as anticipated consequences: the more facts that arise "...the clearer and more pertinent become the conceptions of the way the problem constituted by these facts is to be dealt with." (p. 109.) This is the process of problem-determination.

'These ideas are not the same as suggestions. The suggestions "spring up, flash upon us, occur to us" as a matter of existence. The ideas differ from them as they are more like predictions and anticipations. The suggestions have no logical status, but the ideas have. Though every idea starts as a suggestion, but not every suggestion is an idea. The suggestion takes on the status



of an idea when it is perceived as a possible solution to an indeterminate situation. Even though the suggestions are not of a "logical" character when they "pop into our heads," they are, according to Dewey, the "conditions and primary stuff" of logical ideas.

The ideas, since they are logical in character, are primarily conveyed by symbols or the use of language. These symbols are the conceptual material that suggests a solution to the problem, while the perceptual facts locate the problem. As step two occurs with the flow of ideas, step three is the selecting of one or more of these ideas with a solution in mind. This is the formation of an hypothesis.

#### IV. Reasoning

According to Dewey, if an idea is accepted immediately, without further reasoning, it is not a warranted ascertainment--"even if it happens to be correct." (p. 111.) In order to check that a meaning is not being accepted too quickly, one must ascertain the meaning of that symbol in relationship to the other meanings in the same system. If we accept one meaning, then we are committed to the acceptance of the other meanings. Through a series of "intermediate meanings," the meaning that is "more clearly relevant to the problem in hand than the originally suggested idea" is established. (p. 112.) This concern with meanings is essential



for Dewey as the "discourse directs the activities which, when executed, provide needed evidential material." (p. 112.)

Dewey ascribes a very essential role to the development and use of language. As a matter of fact, Dewey wants to claim that it is language that allows the brute biological behaviour (facts, data) to become intellectual and conceptual in nature. This is an essential process within the whole of inquiry, but also within this step called "reasoning in the narrow sense," as this is concerned with the relating of meanings to other meanings. In this section, therefore, I wish to try to explain how language, according to Dewey, can be that operation that leads the biological facts of perception to be conceptual propositions on meaning.

The initiatory problems that start the inquiry method commence with the physical (in the sense that nature is problematic), but the meanings attributed to these problematic situations are derivative of the culture. The fire (as representative of the physical), in distinctive human behaviour, is something we all use to assist us in controlling our events (it's something to use for cooking, etc.). The meaning is given in a cultural context and that meaning is passed on and connected to, the use of language. The cultural aspect will modify all aspects of the physical (there is no dichotomy) and vice versa. Man is a social animal, and the culture is passed on by his social situation as well as his biological-physical aspect. The indication that such an inculturation has taken place and is taking place is the development and use of language.



Dewey wants to say that language, as a cultural influence, affected biological behaviour, and intelligence was the result. "To speak, to read, to exercise any art, industrial, fine, or political, are instances of modifications wrought within the biological organism by the cultural environment." (p. 43.) Language is the function that transforms the biological into the intellectual. How is this done?

The first constituent of this development, according to Dewey, is to note that "organic behaviour is centered in particular organisms." But in intellectual behaviour the particular or individual aspect of behaviour has to be ignored or mastered. That is, if the inferences and conclusions that are reached are to be considered valid, then the subject matter and the process used to arrive at the conclusions must yield identical results for all those who reason. If the same evidence leads different people to differing conclusions, then either the evidence is not what it seems to be, or the conclusions are wrong (inadequate process was used), or both. The first dimension is, therefore, that intelligent behaviour is "general."

The second dimension that will affect the development of the biological into the intellectual is that the activity in question has to be objective. The personal traits, attitudes, and the like are always in play in any given event, but when these traits are precluded from taking effect, then the activity will be objective (public).





Thirdly, it is obvious that the biological behaviour is always temporal in nature. Intelligence emerges when propositions about the temporal are issued, and these propositions are never temporal in relation to one another.

None of these dimensions tell us how the organic becomes the intellectual; they only tell us the difference between the two forms of behaviour. But it appears that this intellectual behaviour will be general, public, and the statements will be non-temporal.

According to Dewey, one of the reasons why the organic develops into the intellectual is related to the fact that man, as a social animal, is a product of a cultural environment. As such, he is forced to implement into his behaviour the attitudes, beliefs, customs, and habits which are general and public. Man has no choice but to function in this fashion. What Dewey has failed to note is that man becomes a social animal only after communication and language are well developed. Therefore, the language development cannot be used both as the cause and the effect (product) of the development of intelligence.

Dewey moves to the position that language is the necessary, and finally, sufficient condition for the transmission of organic activities into the intellectual. (p. 46.) This, he claims, arises from the fact that, on the one hand, language is a biological mode of behaviour, and on the other hand, it compels the individual to inquire into the cultural conditions of his society from a



non-personal point of view. This appears to be a "chicken and the egg, which came first" situation. Certainly, Dewey is describing what one does with language and its role in our cultural development. But if language is the necessary and sufficient condition of the transmission, Dewey then has to show us how language develops from the biological. This is a very unlikely task. Yet, it is this unlikely task that Dewey seems intent on undertaking.

According to Dewey, there are two kinds of language systems that are developed. The first system is where the words relate to one another and the words have meaning because they are in the system; but there has been no effort to show how the words must logically fit into the system. In this case, the words are obviously in use in the system, but there is no examined relationship of how the meanings should hang together. This system is called "common-sense language-meaning."<sup>2</sup>

The second kind of language system is of the type whereby each meaning that enters into the language (usually a private or sub-culture group), is expressly determined by its logical relationship to other members of the language group. There is a justification process for the institution of any particular meaning for a word into the already existing language. Dewey calls this type of language meaning, "scientific" or "intellectual."

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<sup>2</sup> See John Austin, "Performative Utterances," in Philosophical Papers, ed. by Ormson and Warnock (Oxford: The Clarendon Press, 1961), p. 220-239.



Having made the distinctions in the types of languages, Dewey further enlightens us on the functions of language. There are "symbols" and "signs" connected to any language system. Symbols are the "artificial signs" and signs are the "natural signs." For example, the word "tree" refers to an object with certain qualities. The meaning of that word has been established by agreement of conjoint action in a social setting. The word is an artificial sign or a symbol. Tree, as a natural sign, is the actual occurrence of an object that is pointed to as sign of a tree.

The difference between the two lies in their representative function. The signs obtain their representative capacity because of the connection "of things to one another," or between the evidence and the existence. The symbol receives its representative function by social agreement and use, and it indicates a relationship between propositions. The actual difference, according to Dewey, is that the symbols have acquired an "intellectual quality"; that intellectual quality is that it has a representative function in society. The representative function of signs is limited; limited by existence. The representative function of symbols is unlimited, or rather, limited by social agreement only. Signs, therefore, give us "significance" and symbols give us "meaning." Natural signs are evidence of other existence, or rather, signify other existence; symbols provide no evidence of existence, but they make discourse and reasoning possible.



Again, Dewey has not indicated how the symbol-meaning relationship develops. He has only indicated there is a difference between the two forms of relationships, and he is quite correct in so stating. But Dewey is talking about how the two functions interact in our society, given that we already have a language and communication skills that are fairly well developed.

The essential element is that, according to Dewey, symbols and the development of symbols make possible discriminations and hold on to the experienced qualities of the significance-connection that would otherwise disperse immediately after the perception. Insofar as language is the means to retain the qualities of things in order to make inference, the development of language becomes the means by which purely biological behaviour becomes intellectual in nature. Language did not originate association or interaction; it (language) did emerge, however, from previous animal (biological) activity to "transform prior forms and modes of associated behaviour in such a way as to give experience a new dimension." (p. 56.) This new dimension is reflective thought or intelligence.

The actual occurrence of reflective thought from biological activity is, according to Dewey, best described in the following fashion and is dependent upon the development of language.

The first condition is that culture is both "product" and "condition" of language. Culture is a product in that language is the means to pass culture on from generation to generation. It is a condition of language in that meanings differ from group to group.





Stated in this fashion, Dewey is saying that if we have no language, we have no culture, and if we have no culture, we have no language. However, the identification of the two items means that one cannot possibly show how one developed from or because of the other.

The second "step" is that animal activities, such as eating, take on a new quality and eating becomes a feast. The institutions of a culture are thereby developed. (Here culture is a product.)

Thirdly, without language the results of previous experience are retained by biological organic modifications--but the type of modifications that do not allow, or at least tend to retard, any further modifications. With the development of symbol meanings the modification of past experience is accelerated and these new combinations bring on an intellectual dimension to the purely biological behaviour. Here again, culture is a product of the intrusion of language, but it is with the assumption that a language is a given.

Fourthly, the consequence of organic activity is inter-actable. It is a fait accompli. When we represent our activities in symbolic fashion, the end-in-view can be manipulated so that we might avoid any undesirable end-in-view. This is not purely a "mental" activity, but all such actions can be described as a modification of organic behaviour by the use of symbol-meaning, according to Dewey.



These are the four reasons why language forms the conditions (and the product) for the development of intellectual behaviour. These conditions are not identical with intellectual behaviour, but they are pre-requisite conditions. Dewey puts it in this way:

The use of meaning-symbols for institution of purposes of end-in-view, for deliberation, as a rehearsal through such symbols of the activities by which the ends may be brought into being, is at least a rudimentary form of reasoning in connection with solution of problems. The habit of reasoning once instituted, is capable of indefinite development on its own account. The ordered development of meanings in their relations to one another may become an engrossing interest. When this happens, implicit logical conditions are made explicit and then logical theory of some sort is born. (p. 57.)

The first step is to use language for projection, control, and reflection, thus producing intellectual behaviour from biological behaviour. However, this is not just the first step, it is the step. Given language, intelligent behaviour is automatic. Dewey has yet to show how intelligent behaviour develops. I would agree with the difference noted by Dewey between the two different forms of behaviour; but they are two different kinds of behaviour. Once the first step of developing an artificial symbol to stand for an event or the relation of any two events has been accomplished, the major step toward intellectual behaviour has been made. The question is, how did this step develop from the biological? Dewey has to avoid all discussion of this step because there is no possible way to show how such a step emerged from the previous organic behaviour. Response to sign-significance is altogether a different response



than symbol-meaning. The latter denotes a higher degree of complexity and interaction than Dewey has accounted for. They also denote a different kind of interaction. No one yet knows how the first transformation was made when man said "fire" to stand for the natural sign 'fire.'

#### V. The Operational Character of Fact-Meaning

According to Dewey, with the facts of experience (hence "existential") locating the problem, and the ideas and meanings (non-existential) solving the problem, there appears to be a problem in connecting the two. For Dewey wants to claim that the non-existential must have some transforming effect on the existential. Dewey says that this problem can only be overcome when it is "recognized that both observed facts and entertained ideas are operational." (p. 112.) What does "operational" mean? Ideas can be operational in that they lead us to further operations of inquiry and observations. But in what sense are facts operational? Dewey's answer is that facts are operational in that they have been "selected" for a purpose, namely, the statement of the problem or purpose of inquiry, and as such, "they are not merely results of operations of observation...but they are the particular facts and kinds of facts that will link up with one another in the definite ways that are required to produce a definite end." (p. 113.) It is clear that the facts serve as evidence for the inquiry, but it should also be clear that Dewey has not made the facts operational per se as much



as he has indicated they can become such when ideas are applied to them. Facts do not lead us to the end-in-view, ideas do; therefore, facts can only be operational in a secondary sense.

Nonetheless, when we have a problematic situation that appears to require inquiry, facts are given, that suggest an idea for a solution, new facts are given that link together in a pattern with new ideas and new facts, etc. Somewhere along the process "the ideas that represent possible solutions are tested or 'proved.'" (p. 113.) The first facts are then "trial facts," yet to be tested, that is, they become the "facts of the case" as they are tested and proved to be functional in that particular situation. It is perhaps their "provability" that Dewey makes reference to when he calls "facts" operational.

What is the role of language in all of this?

But if they (facts) are not carried and treated by means of symbols, they lose their provisional character, and in losing this character they are categorically asserted and inquiry comes to an end. The carrying on of inquiry requires that facts be taken as representative and not pre-sented. This demand is met by formulating them in propositions--that is, by means of symbols. (p. 114.)

## VI. Common Sense and Scientific Inquiry

As noted in section IV on reasoning, a distinction was made between common-sense language meaning and scientific language meaning. It was noted that the essential difference between the two forms of language was their subject matters rather than their form. According to Dewey, the subject matters are different





because of the nature of the problems the two languages deal with, rather than any logical structure. Each form of language, therefore, has different consequences they are concerned with. The culture and interests of society would dictate language usage and meaning within that language meaning system.

With the rise of scientific language systems where meanings "are related to one another on the ground of their character as meanings," the meanings were freed up from the direct reference to a particular cultural group and a particular cultural interest. (p. 115.) Being free from this individual cultural concern, the objects of the scientific language become "relations" of meanings stated in propositions, and the qualities take on a secondary role.

According to Dewey, there is still a common pattern to both language systems, but the pattern of the common-sense language system deals with qualities and their control; while the scientific language system deals with non-temporal, non-existential propositions that refer to meanings as they relate to other meanings in the system. The scientific subject-matters are general, abstract statements that refer to "any set of time and place conditions," but not to any one in particular. (p. 117.) This step in the inquiry is not so much a step as it is a clarification that the nature of the conclusions of the inquiry method must fit the scientific language system in order to be called "warranted assertions."



There are a few general observations that should be noted before passing on to the critical section. Dewey does not claim that the steps in the inquiry method need to be sequential or in a chronological order. Dewey says:

The five phases, terminals, or functions of thought, that we have noted do not follow one another in a set order. On the contrary, each step in genuine thinking does something to perfect the formation of a suggestion and promote its change into a leading idea or directive hypothesis.<sup>3</sup>

Therefore, one may move from any one of the steps mentioned to the testing of the hypothesis and the formulation of an assertion that is warranted.

Dewey is claiming that the pattern is developed, not as deductions from self-evident axioms or a priori principles, but from a close investigation of the ways in which we actually gain reliable knowledge. The logical forms originate from and in experience in operations of inquiry.

Inquiry is an art. As one does not become a good chess player by simply knowing the rules of the game, similarly one cannot conduct successful inquiry by learning the essentials of inquiry. To know how to use the rules of inquiry in concrete situations one must possess sensitiveness to recognize the unique character of a problematic situation; one must patiently formulate the problem; one must have creative imagination; one must be

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<sup>3</sup> J. Dewey, How We Think, p. 115.



objective in assessing the worth of each new possibility; one must be open-minded to modify beliefs in the light of new experience.

The inquiry method or pattern of inquiry is closely linked to Dewey's educational recommendations. Some of these recommendations will be dealt with in Chapter V. The connective link between educational practice and the pattern of inquiry could be mentioned at this point. One quote should suffice at this stage.

Processes of instruction are unified in the degree in which they center in the production of good habits of thinking. While we may speak, without error, of the method of thought, the important thing is that thinking is the method of an educative experience.

What Dewey is saying, is that the method of inquiry (thinking) is the correct method of instruction and learning.

## II

This section will deal with some of the problems that arise in connection with Dewey's notion of the pattern of inquiry. This is not intended to be an extensive exercise, nor are the problems discussed in any particular order. The above exposition of the pattern of inquiry was given as one unit so as to show in this section where the particular problems arise in the general pattern. It is not claimed that these problems are separate as Dewey's theory overlaps continually (or is "continuous"), and the critical remarks will follow that trend to a certain degree.

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<sup>4</sup>J. Dewey, Democracy and Education, p. 163.



(i) Perhaps it is fitting that the first problem to be noted is about the origination of logical forms. This is the crux of the pattern of inquiry and it is the claim that the pattern arises out of successful inquiry into experience. According to Dewey, inquiry is as objective and accessible to study as any other modes of behaviour. (p. 102.) When one moves from the indeterminate to the determinate situation, one has gone through the process of inquiry. But how does one inquire into experience to discover the patterns of successful experiencing? That is, how does one use the inquiry method before one knows what the patterns of inquiry are? Since we have no final word about what inquiry should be, how do we become aware that we are now doing or have done inquiry? Should it be always a matter of trial and error? There is no predetermined notion of just what that pattern entails. Dewey claims that "inquiry" into inquiry shows us what those patterns are to be.

If the process of inquiry into inquiry is called the "knowing" aspect of experience, and the product (warranted assertion) is called the "known," there are those who would claim Dewey has developed an impossible situation. If the knowings are observable facts and can be inquired into in the same way as the knowns (warranted assertions), then there are at least two problems that arise, according to Robert Wellman.<sup>5</sup>

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<sup>5</sup> Robert Wellman, "Dewey's Theory of Inquiry: The Impossibility of Its Statement," Educational Theory, XIV: 2, April, 1964, p. 103.





The first of Wellman's claims is that it is logically impossible to talk about the theory of inquiry at all because knowing is one process and the known another, and one could never talk about the knowing except as a known. The knowing must always be referred to in the past (that is, as a known) and the actual process of knowing that is going on in the present could never be referred to as it is inaccessible to anyone, including the individual involved in the inquiry.

Wellman further points out that when referring to those aspects of the inquiry that are public, that is, when inquiring into inquiry, one develops an infinite regress of inquiry into inquiry into inquiry, etc. If logical forms accrue to subject-matter in the process of inquiry, then one can inquire into inquiry to get more logical forms ad infinitum. We either arrive at some settled object (knowledge) or we get an infinite regress.

Wellman's first objection can be easily overcome by pointing out that no one ever requires that one talk about a particular instance of knowing as one is going through the process. I do not refer to my "seeing" as it is happening, and can only refer to the act in the past tense. We cannot be discoursing and simultaneously be discoursing on the discourse.

The issue of inquiry into inquiry is more to the point of the discussion of how logical forms "come out of" inquiry, or how the primary inquiry can generate its own ideational material. It



appears there are two steps involved. One, inquiry into experience and this produces logical forms which arise out of the situation, not the inquirer. The second step is the inquiry into inquiry which Dewey calls logic and the Causa Cognoscendi (known cause) of logical forms. (p. 4.) The primary inquiry is the causa essendi (essential cause). The function of logic for Dewey is, therefore, like a road map whereby we can check where we are in the logical process. This, however, does not show how an infinite regress is impossible or even improbable. Dewey is not so much arguing against the possibility of an infinite regress as he is that logic (inquiry into inquiry) is not the originator of logical forms. It appears that Dewey is caught at both ends of the inquiry. He has explained that the logical forms (the pattern of the method) come from inquiry of primary experience, but he has not explained how they are arrived at. At the other end, he cannot show when inquiry should stop and use the forms discovered. Perhaps by referring to the infinite regress of inquiry into inquiry, Wellman was simply indicating the difficulty in pointing out when a pattern of inquiry emerges, if they emerge at all. It is not at all clear why the patterns emerge from experience; and the inquiry into inquiry is an articulation of the patterns, not a discovery of patterns. Since these patterns simply emerge, ipso facto, one has the haunting feeling that it is really necessary for the patterns of inquiry to emerge from our primary experience, necessary



in the logical sense. This would mean that Dewey's descriptive metaphysics is not really as descriptive as he would maintain.

(ii) The second problem will deal with the concepts of 'indeterminate' and 'situation.' The explanation of Dewey's conception of 'indeterminate situation' was hopefully accurate. Given that, it is difficult to determine in what sense the "indeterminate situation" is a situation at all. The indeterminateness would seem to indicate that something is happening, but one is not sure just what it is. Surely this form of a situation is different from the situation or event of a car which is approaching me on a road. In this latter case, there appears to be a well-defined structure or event that renders that situation definable immediately or, at least, one can point to it with some high degree of meaning. With the indeterminate situation all one has is puzzlement. Even the notion of the significance of the situation being confused does not save the situation. If I am not aware of the significance of the car being on the road that I am standing on, that is no better than being in a confused indeterminate situation. It is unfortunate that Dewey uses the word situation both for a metaphysical explanation of a concept in nature, as well as a step in the pattern of logic, but it is just a pre-condition of inquiry. In the instances of the determined situation, the limits of the situation appear to be well marked out, given, but ineffable; in the other case there does not appear to be any way to determine



the situation at the present. Doubt by itself tells us nothing about a situation as there has to be doubt about something, but since this something is ineffable, one is left doubting over something I know not what.

This concept of situation also brings out the "holistic" notion of situation that has been mentioned by others.<sup>6</sup> If a situation is a "qualified whole which is unique" or "diverse distinctions and relations which form a unified qualitative whole," one is left with the question "How large is a situation?" If the unified whole constitutes the environment, then our environment (the situation) must consist of all there is in the universe. We are thus caught up with inquiring into the universe whenever we inquire. Theoretically, this is the logical implication; of course, impossible in actuality.

It is difficult to see how Dewey could avoid this conclusion and still maintain his conception of 'situation.' In his desire to avoid explaining "nature" as something out there, objective, he is caught up with the problem of how to make distinctions that are discrete in makeup and can operationally be referred to and talked about in a manner that separates the object from the rest of what there is. This unwillingness to concede an object in the situation brings up a further problem.

Any indeterminate situation must involve both the individual and the environment (or more rightly, the interaction between the

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<sup>6</sup> Bertrand Russell, "Dewey's New Logic," in The Philosophy of John Dewey, P. A. Schilip (ed.), p. 139.





two), and as such, it is not the case that only the individual is confused in a confused situation. In one swoop, Dewey has done away with what might be considered a valid distinction: That of a confused individual in an ordered environment. In Dewey's terms of reference there could never arise a situation where the individual was confused but not the environment as well, at least in terms of the interaction. An individual reading or attempting to read a city map may be confused, but that does not mean the map is confused as well. In what sense is the situation confused if only one part of the interaction is indeterminate? Dewey may attempt to overcome this criticism by claiming that the significance of the situation is confused. This will not save us, however, as the indeterminate situation is a metaphysical notion, it is part of nature as well as the way individuals perceive events. As such, the significance of a situation is far less comprehensive than this metaphysical structure. It is not just the significance that is indeterminate, it is nature. If Dewey is truly descriptive, he has avoided describing to us how the individual is confused but his environment is not. If Dewey uses the word "doubtful" as in "I am doubtful," then the "doubtful" in a "doubtful situation" has to be a different kind of doubtful. "I am doubtful" refers to a biological state--doubtful situation does not.

This brings up a further issue with situation. Dewey claims that inquiry must have "existential import" on the events. Dewey has described this in several ways; how language makes the biological



conceptual, the denotive method, inquiry changing the situation of indeterminate into determinate, etc. This is a question on the nature of the existential change on the situation, especially by non-existential, non-temporal propositions. H. S. Thayer, in The Logic of Pragmatism,<sup>7</sup> gives us a good example. Suppose a child is placed in a maze, the child and the maze make up the situation. The child wanders, is confused about what is going on. Then it comes to him that he has to find a way out of the maze and he does so. Inquiry has been used to settle an indeterminate situation. But what are the constituents of that situation that are troubled, confused, and perplexed? According to Thayer:

Can we say the conditions imposed by the maze have these characteristics? Only in one clear sense: we observe that the child exhibits these characteristics and with respect to his relation to the maze, he is troubled, confused, perplexed, etc.<sup>8</sup>

Or take the example of a person lost in a forest. This is an indeterminate situation; there is perplexity, confusion, doubt. But he finds his way out of the forest after reflecting and using the inquiry method. In what sense has the forest changed existentially? What is the existential import of that changed situation? Is it the crushed leaves, the bent twigs? Or is it that the forest no longer has the property of having a lost person within its boundaries? If it is the latter, this is a logical, non-existential condition.

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<sup>7</sup> H. S. Thayer, The Logic of Pragmatism (New York: Greenwood Press, 1952, 1969), p. 83.

<sup>8</sup> Ibid., p. 83.



So how is the forest changed existentially?

Dewey seems to have confused the epistemological function of a situation (confused, perplexed, etc.) with the metaphysical function (does not hang together, etc.). The identification of these two categories is at best a language misuse, and at worst, a logical category mistake.

There are even problems with the determinate situation. Given that the determinate situation represents a condition that is settled, understood, has meaning, fits into a pattern of experience, etc., within the inquiry method, how does one determine when the situation is settled? Any situation "this side" of the indeterminate situation is more settled; and since there is no final situation that is absolutely settled, at what point do I determine that the situation is settled enough? When I have a warranted assertion? But about what? Suppose I choose to stop inquiry at point "X." I might have gone on to "X<sub>1</sub>," but would that have made any difference? How do I know that I have done enough inquiry for this situation? How do I know that things are working out the best they can be? I cannot ever know that for I have no end, just an end-in-view.

Dewey's own concepts cause him some problems with the notion of 'indeterminate situation.' In Chapter III we have noted that Dewey makes reference to "habits of intelligence." That is, when an individual is thinking or reflecting as he should, then the



habits have instilled themselves so that the individual acts intelligently in his domain (the sailor in his domain, and the carpenter in his domain, etc.). Suppose then we have a very good carpenter who has developed habits of reflection and he acts intelligently in building a house. We assign him the task of building a house. Where is the indeterminate situation that does not "hang together" or is "doubtful?" The carpenter knows very well what to do and how to do it. Granted, he has a task to perform, but there is no doubt as to how to perform it. The task assigned is not at all in the same category as an indeterminate situation. In spite of the fact there is no indeterminate situation, this man would be acting intelligently due to his habits of reflection.

Insofar as Dewey wants to maintain that the indeterminate situation is a "necessary pre-condition" for reflective thought, we can safely maintain that he has moved from his position on descriptive naturalistic empiricism to a traditional metaphysical position. This is a deep metaphysical confusion involved in this notion of situation.

There is one final issue that should be discussed before leaving the notions of 'indeterminate' and 'situation.' There are cases where the situation (not just an event) is given in such a fashion that it is immediately clear what the situation entails. There is no doubt, perplexity, or confusion, and this awareness is immediately perceived. How can Dewey account for this immediate





awareness? What is the logical status of this immediate situation that is not indeterminate? It cannot be knowledge or a known as that would be counter to everything Dewey has said, and he must avoid the conception of direct or immediate knowledge. Dewey tries to account for this by reference to "apprehension," which is when one perceives or notes something without questioning. This function, according to Dewey, allows a direct "understanding" of the given situation. (p. 143.) This immediate understanding, of course, is only possible because of past experience and the perception leads us to judge the new situation as an almost identical situation experienced in the past. Thus, we say that we understand the situation immediately. An example might be coming into a room and perceiving a red book on a desk; I can say that I immediately understand what the situation entails. What this means, however, is that I can say that I understand the situation, but it is not knowledge or a warranted assertion, for as Dewey has indicated, unless there is inquiry, the apprehension is not warranted "even if it is true." So I am left with an immediate situation that is apprehended and understood, and it may be true, but it cannot be accepted as such as it has yet to be tested. This is a strange dilemma for a form of experience that constitutes a good majority of our experience; most of us "immediately apprehend" most of that around us due to our familiarity with the objects. In a chapter when Dewey was analyzing a "chair," he claimed that the empiricists obliterated the "chair" which was



given and reduced the chair to a series of perceptions, colors, etc. Fair enough. But one wonders whether Dewey has not done the same thing to the immediately apprehended. In a sense, we have to disregard that which comes to us as understood and subject it to a form of analysis called inquiry before it becomes understood knowledge. Dewey cannot safely discuss the notion of immediate apprehension and still maintain his form of empiricism.

In a paper entitled, "What Does Mr. Dewey Mean By An 'Indeterminate Situation?'"<sup>9</sup> D. S. MacKay raises the question regarding the use of the term "doubtful" as synonymous to an "indeterminate situation." In his reply, Dewey admits "...that in one point mentioned by Mr. MacKay I was guilty of a loose use of language of a kind that readily leads to misunderstanding."<sup>10</sup> But Dewey was not too repentant as he went on to claim that he had to use words that were ambiguous and vague, because the 'situation' was vague, perplexed, confused, ambiguous, etc.

This does not represent a total discussion of all that could or had been said about the notions of 'situation' and 'indeterminate situation.' It suffices to the extent that it shows there are inherent weaknesses in the first step of the pattern of inquiry.

(iii) Dewey claims that "...we know what the problem exactly is simultaneously with finding a way out and getting it resolved."<sup>11</sup>

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<sup>9</sup> D.S. MacKay, "What Does Mr. Dewey Mean by An Indeterminate Situation?" in The Journal of Philosophy, Vol. XXXLV, 1942, pp. 141-48.

<sup>10</sup> John Dewey, The Problems of Men, p. 327-28.

<sup>11</sup> John Dewey, How We Think, p. 108.



There is a problem in defining the constituents of the process involved in identifying problems and how solutions or alternatives are determined as well. The facts of the case, or the suggestions, just "pop into the head" so to speak. It is a condition of the experience that dictates which facts will be used and which will be discarded. Dewey may be claiming that if I am being choked by an assailant, the suggestions that come to mind relate to the situation at hand. I do not consider what I will be doing next spring or wondering if the potatoes have flowered. The crucial question is, of course, why do the suggestions relate to the situation at hand; what dictates that the facts will be pertinent? Dewey's answer relates to the material covered in Chapter III where it was determined that all people have a natural tendency for suggestions to flow, although we may learn through our bad habits to hinder these natural tendencies. This is tantamount to saying "that's just the way it is" and this, of course, is a non-functional explanation. We gain no insight as to how these suggestions arise, and why it is that they are pertinent. One does not know the source of the suggestions or why in fact they work in practice. To call this procedure a pattern of thought or a form of logic, does not help as that is simply giving a name to an unknown process, and this does not illuminate us as to what the process involves. It seems that Dewey is being too descriptive in that all the crucial questions are ignored in favor of describing what happens as opposed to why they happen. A mind



apart from the habit structure may be one solution, but definitely not for Dewey.

The determination of the problems is really a crucial step in the inquiry for, if one does not perceive a problem, or too many problems, or is late in perceiving a problem, inquiry is lost. It cannot commence. This point will be even more pertinent when we discuss educational practices in the next chapter.

Dewey gives the same rationale for the arrival of ideas from the suggestions. The ideas are alternatives that simply emerge as a result of the situation one finds oneself in. But consider Dewey's example of the fire alarm in the assembly hall. What is to say that if I determine all the facts of the situation I will have an idea at hand? Suppose I determine that there is a fire, it is in the back of the hall, the smoke is throughout the building, people are running in every direction, the fire appears to be spreading. Do these facts give me an alternative, or rather, does an alternative simply come to mind? Should I sit and hope the firemen reach the hall first? Should I run with some of the crowd? Should I sit and scream? These are some of the alternatives. How would I know which one to select? What is indeterminate about this situation? I have defined the problem specifically, namely, there is a fire and I want to avoid being burned, but no solutions are forth-coming that I can see will lead me to a successful conclusion. The "idea" has to be an anticipated consequence, but that anticipated consequence can only be a hope





or desire that things will work out for the best. There is no necessary connection or natural emergence of anticipated consequence that will automatically lead me to the right conclusion. These forms do not emerge from the situation, although the situation is certainly a part of the condition for the emergence. There are some other constituents involved in order to make the decision as to which alternative one will select. It is those other constituents that Dewey does not explain as this would involve going beyond his descriptive metaphysics.

The above problem can be stated in another way. Dewey claims that facts and ideas are both operational and functional. Facts, according to Dewey, are functional in that they serve as evidence for a particular point of view. But Dewey also claims that insofar as facts are functional, they are also operational. Facts are operational in that they are the constituents from the indeterminate situation for the purpose of inquiry. Ideas are operational in that they lead one to a conclusion in inquiry, and I suppose they are functional in that they can be used for inquiry. The problem occurs when Dewey claims that facts are operational. The fact per se just is, it has no directional force whatsoever. But for Dewey, in order to bridge the gap between having an event (fact) and selecting an hypothesis (selecting ideas), facts have to take on the quality of being operational and facts have to initiate and direct the process of the inquiry. But facts alone can not do this.



The only way to make sense out of the issue of facts being operational is to claim that facts are functional in that they are received and then used for some purpose, and that operational refers to the way facts are received. If this is what Dewey means by saying facts are operational, then facts come to us as expectant, to be able to lead us to other facts, etc. This would be consistent with Dewey's view on nature. However, they could only be operational in that they could only lead us to more facts, not to other ideas, for the expectant aspect of nature just leads us to more events. To confuse the issue even more, Dewey claims "naming them (facts) 'operational' is but a theoretical recognition of what is involved when inquiry satisfied the conditions imposed by the necessity for experiment." (p. 114.) If this is the case, then facts are not operational by nature, but only become such for inquiry. This would argue against the notion that "operational" refers to the way facts are received by the individual. Operational would not be a reference to an existential quality of facts. The gap between facts and ideas is still visible, and this refers us back to the gulf between the existential facts and the non-existential ideas. Insofar as both facts and ideas are functional and operational, Dewey has blurred and glossed over the distinctions, and he has attempted to fill the gap by making them identical in operation.

(iv) The three general areas discussed thus far are all related in form and context. They are all referring to how inquiry



begins and how inquiry changes the indeterminate situation. A few words should now be stated about the notion of 'successful inquiry' and the psychological notions that are connected with this. Dewey has indicated that inquiry is formulated (or emerges) from successful habits of inquiry. Successful in this instance can only have reference to the habits and instincts Dewey claims one must have in order to do inquiry so as to come to a warranted assertion. If the habits of reflection are necessary for inquiry and they, in turn, are really the method of inquiry viewed from a different angle, then, in fact, Dewey has a circular position. In fact, "suggestions" and "orderliness" sound very much like the pattern of inquiry as explained from a psychological perspective.

If one were to stop the inquiry before a warranted assertion was reached, it would not be the case that inquiry was not being used; it would simply be a matter that inquiry had been stopped, probably because one's psychological habits, viz., whole-heartedness and responsibility were not fully developed. Dewey would avoid any negative reflection on the function of the method of inquiry in this fashion because in the cases of unsuccessful inquiry, the onus could always be placed on the inquirer, not the method. This reasoning, however, leads one to a position of never being able to test the method as a means to a successful end-in-view, as any failure would be interpreted as a failure on the part of the individual. I see no way around this conclusion if one draws such a close relationship between the process and the product of inquiry as Dewey maintains.



Also, Dewey maintains that because of language, inquiry is general, as mentioned earlier. That is, if all people did inquiry in the same way (had the same habits) and used the same facts (had the same perceptions), then they would arrive at the same conclusions. How, then, do we account for different conclusions? It is because of the individuals doing the inquiry.

(v) The notion of judgment has not been discussed in any detail, but it is an essential element in the pattern of inquiry. As a matter of fact, Dewey claims the method of inquiry is but a series of judgments leading to a final judgment.<sup>12</sup> Since judgment is so essential, I will try to explain the role of judgment and then try to show the inadequacies in reference to the pattern of inquiry.

Primarily, Dewey's explanations of judgment as contained in Logic: The Theory of Inquiry and How We Think will be used as the sources to explain the relationship between the process and product.

It appears that good judgment and common sense have a lot in common. Judgment appears to be a knack, cleverness, or insight that certain individuals possess. The judging process starts with an indeterminate situation; a judgment is made pertaining to a particular problem; facts, data, and ideas are selected by judgment to arrive at an hypothesis; and finally, the testing occurs. This can be referred to as a series of judgments that lead up to a final judgment which takes on a terminating quality and is called a

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<sup>12</sup> John Dewey, How We Think, p. 119.





decision. The decision terminates the judging process. This process is, of course, identical to the reflective pattern and the method of reflective thought is to be understood as a "series of judgments," with each smaller process being identical to the larger process (as a whole) and a terminating judgment at the end of the process.

If Dewey intends that this explanation of judgment to be a form of reflective thought or to describe to us what the process of reflective thought entails, he has failed in his endeavor. Given that the term "judgment" is used for the constituent parts of the process and as well for the conclusion of the process there may be some logical problems in connection with the method as a whole. It appears that the whole process is defined co-extensively with the constituent parts. The two cannot be identical if one is to be a series of the other by way of explanation. If the reflective method is also to be construed as a series of judgments, then the judgments should be different in kind or quality than the reflective method. Such is not the case and even the final decision is just another judgment. It appears that Dewey has not distinguished between the judging process and the final judgment per se, and Dewey has to show how the judgment is temporal-spatial and be a relation of meaning.

According to Dewey, the final judgment is what he calls "individual," (p. 122.) here individual refers to a situation



that has been explained or determined, situation being larger than the given object or singular event. The subject of this final judgment is data or the particular, the singular. But the particular data, according to Dewey, is determined "in correspondence with each other (the subject and the predicate) in and by the process of thought, that is, inquiry." (p. 124.) What is the nature of this correspondence to the predicate? According to Dewey, "there must be some one question to which both the subject 'this' and the predicate...are relevant." (p. 126.) The "must" in the sentence is extremely relevant. Dewey is giving us a definition. Interpreted, the sentence could read, one may have a "this" without any connection to the predicate, but if one does the proposition will be worthless as there will be no existential outcome; therefore, there must be at least one question to which they both relate.

In spite of this, Dewey insists that the subject be related to the predicate in that the latter will cause a change in the former. The data cannot be given directly to the judgment (we would then have to know the given) nor can it be a metaphysical-ontological substance. It is a substance in the "logical sense of that term." It is what it can do for inquiry. This is right where we were with the explanation of data as it related to the formation of ideas. It is the same problem explained in a different way.

The predicate of judgment is the same structure as the ideas of inquiry: they (the predicate) are the meanings that are suggested



to the solution of a problematic situation. They are not the solution, only a method to find the solution. It is still going to be difficult to reconcile how the judgment is going to be the final outcome of the method and the method itself.

The copula of judgment does not exist independently of the subject and the predicate. It is the manner the two elements interact. Perhaps the simplest fashion to explain copula is to say it is the relationship that allows data to be picked out for testing materials, and by which certain ideations and conceptual matters are arrived at to assist the changing of a situation to be settled. The copula is distinguishing and relating at the same time. To help explain to us how something can distinguish and relate simultaneously, Dewey claims two positions throughout the discussion. One, copula is always to be viewed as operations, and two, judgment is "a process of temporal existential reconstruction." (p. 134.)

It appears, therefore, that judgment is temporal, but not in that it takes time. It is only temporal in that it allows for the reconstruction of subject-predicate. To my mind, this is a thoroughly confusing statement. Judgment is a process (processes take time), that is temporal (but not in the sense it takes time), and we are left with a process that does not take time to be completed and yet cannot be done spontaneously. Dewey is using the word "temporal" in a new and exciting fashion. It appears that Dewey wants to avoid distinctions between the "act of judging"



and "judgment per se," and even though judgment is described exactly like inquiry, judgment is the outcome of inquiry or the product of inquiry. In his effort to avoid predicating essence or finality to subject-matter, he has involved himself in a deeper dilemma. Dewey maintains, and rightly so, that the copula is sometimes ambiguous.

(vi) A few words should be said about the notion of 'warranted assertion.' The claims, judgments, assertions, that one makes at the end of a successful inquiry process is called "warranted." A number of people have had something to say about this particular notion.

According to Russell, Dewey's notion about warranted assertion is that which is "most distinctive in Dr. Dewey's logic, namely, the emphasis upon inquiry as opposed to truth or knowledge."<sup>13</sup> Russell points out that Dewey has defined inquiry as the controlled transformation of an indeterminate situation to a determinate situation. But if one takes the example of the transformation of a group of raw army recruits into a group of well-trained and orderly troops, this could not be an example of what Dewey means by inquiry. Inquiry could be used to determine the procedures that could be used in the training, but the actual process of taking the recruits from one stage to the other is not an example of inquiry, even though it fits the particular definitional structure. The

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<sup>13</sup> Bertrand Russell, "Dewey's New Logic," in The Philosophy of John Dewey, P. A. Schilip (ed.), p. 143.





sergeant would not be inquiring when he was transforming the recruit. One of the essential problems is, therefore, to distinguish inquiry patterns from non-inquiry patterns. The item that normally sets logical inquiries off from other forms of inquiry is the result--truth or knowledge. However, in the case of Dewey, he has no such search and, of course, would deny there is any such thing as ultimate truth; one only has an assertion that has been warranted by inquiry.

Russell's mode of attack stems from his acceptance of the fact that knowledge does in fact exist, and that a warranted assertion comes to be nothing more than social acceptance, something that is tenuous at the best of times. Russell makes a serious issue over what he calls the psychology involved in Dewey's analysis of warranted assertion, and lays heavy stress on the expression, "If inquiry begins in doubt, it terminates in the institution of conditions which remove need for doubt." It would appear, according to Russell, that Dewey's logic is tied up with a psychological need to feel good about the result. This, of course, is completely alien to Russell's frame of reference.

These forms of attack are exterior attacks and are based on a different frame of reference and a different metaphysic. In all of Russell's comments, he tries to make Dewey's notion of 'warranted assertion' fit the criteria of his own conception of 'truth.' But given Dewey's frame of reference, there are still one or two things to be discussed. Dewey says the need for inquiry arises from



certain "brute existences," but the result of inquiry (and in spite of all the talk about reshaping those brute existences) is in no way related to the existences which originally evoked the need for inquiry. This is not a coherence or a correspondence theory of truth. Knowledge, according to Dewey, does not reveal reality or the brute existence; it has "no concern" with natural existence and given qualities. "The true object of knowledge resides in the consequences of directed action."<sup>14</sup> This is essentially the same thing as saying that knowledge is that which "works," "solves a problem," or has a utility. It is the pragmatic theory of truth.

Since Dewey talks of knowledge as "making and doing," and accordingly introduces "experiment" in the active phase of inquiry, one has to ask the question, "What does 'experiment' experiment with?" It is not with the directly "had" or the original given. It is not with concepts and propositions. It can only be with this added quality called situation and this is not descriptive naturalism. Inquiry is not concerned with the discovery of any connections or correspondence with the antecedent material. Yet it is this very antecedent material that inquiry must change. This dilemma Dewey does not overcome.

This is perhaps the central question relating to the pattern of inquiry, and we have stated it in different fashions throughout the section. There are two crucial points in the pattern, viz.,

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<sup>14</sup> John Dewey, The Quest For Certainty, p. 188.



(a) where direct experience emerges into inquiry, and (b) where inquiry comes back into direct experience. There remains a gulf between having and knowing, facts and ideas, biological and conceptual, process and product, and judgment and decision. These gaps will remain as long as Dewey maintains that inquiry must have an existential import, not only in the sense that inquiry will lead to some physical change, but where inquiry does the changing of the physical.

(vii) I am sure there are many issues that could be brought up in connection with the pattern of inquiry, but I wish to mention only one more. This last question is concerned with Dewey's statement that the pattern of inquiry is "the scientific method." The meaning of the term "method" is not quite clear other than it is a procedure or a systematic arrangement. This is probably the use of the word Dewey has in mind when he refers to the "method of inquiry." Dewey also uses the word as a noun, that is, the inquiry (method) does this, or allows that. I do not want to make the definition of the word "method" an issue, but one does wonder what "the scientific method" entails.

Scientific methods are primarily methods of verification and explanation, and it also appears that there is a difference in its application in each of the sciences. Nagel claims there are four methods of explanation,<sup>15</sup> and they include the deductive explanation

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<sup>15</sup>Ernest Nagel, The Structure of Science, Problems in the Logic of Scientific Explanation (New York: Harcourt, Brace & World, Inc., 1961), p. 20.



the probabilistic explanation, the teleological explanation, and the genertic explanation. If nothing else, this should show that traditionally, science has been heavy on the explanation aspect. The method of science is not primarily a method of discovery. The business of science is to explain the natural phenomena. This is the function of scientific laws. Dewey, on the other hand, holds the view that laws, formulated by science, "are supposed to govern phenomena" and are really "a way of transacting business effectively with concrete existences, a mode of regulation of our relations with them."<sup>16</sup> It appears that for Dewey the scientific method must do much more than simply explain the phenomena, but it must control and direct the phenomena. This is a very restricted outlook for the role of science and scientific method.

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<sup>16</sup>J. Dewey, Quest for Certainty, p. 184.





## Chapter V

### SOME IMPLICATIONS FOR EDUCATION

#### I

The term "implication" has been used in the title of the thesis as well as in this chapter simply for the absence of a better or more adequate word to initiate a discussion on some of Dewey's educational recommendations. The term "implication" may be used to indicate that some ideas or directions are "implicit" in the antecedent considerations which are not expressed clearly or directly. Secondly, and in a more technical sense, the term "implication" can be used to mean direct "entailment" or a strict logical connection between the antecedent statements and the following recommendations.<sup>1</sup> A serious consideration of what is "strictly implied" or what is "merely suggested" is necessary to understand how one is using the phrase "philosophy of education."

Dewey, on his part, considers philosophy itself as "the general theory of education"<sup>2</sup> and goes on to formulate his educational recommendations by using the same set of concepts which characterize his philosophical doctrines. In other words, Dewey makes a complete

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<sup>1</sup>See, Robert E. Tostberg, "Observations on the Logical Bases of Educational Policy," Educational Theory, Vol. 25, No. 1, Winter, 1975, pp. 74-82. "These two meanings--the ordinary and the technical--are easily mistaken for each other in the imprecise formulations that are typical of much that is said about education." p. 75.

<sup>2</sup>J. Dewey, Democracy and Education, p. 383.



conceptual identification between his general philosophy and his specific educational proposals. Thus, education becomes the development of creative intelligence. Learning becomes even for children an exercise in problem-solving where children themselves must start with an indeterminate situation of their own and follow the pattern of inquiry to reach a determinate situation. Though it has been pointed out by many that this may not be an adequate method for learning to appreciate works of art and music, and even for adults to recognize an indeterminate situation in any well-developed field of study as personally problematic, say in astronomy, Dewey did not shift his position. Learning is knowing-- a discovery, an explanation of which would include the concepts of 'experience,' 'transaction,' 'problematic situation,' 'inquiry,' and many other concepts of Dewey's general philosophy.

Thus, while we can say that Plato's educational proposals (i.e., subjects to be studied, methods of studying them, and the time to be spent in mastering them) in the Republic can be explained as implications of one sort or the other to be deduced or drawn out from his metaphysics, epistemology, and social theory, the same cannot be said about the aim (or the lack of it) and the method of education proposed by John Dewey. For Dewey, the pattern of inquiry is the one and only method of knowing, learning, and growing; all his specific recommendations about the ends-in-view to be achieved in education, morals, social and political areas require the direct application of this method of inquiry.



For Dewey, then, there must be a very close connection between the pattern of inquiry and his educational recommendations. He says: "We state emphatically that, upon its intellectual side education consists in the formation of wide-awake, careful, thorough habits of thinking."<sup>3</sup> When we speak of inquiry in reference to education, we are not referring just to the five or six steps that make up the form of the pattern as the acquisition of these is a rather simple matter of memorization. If this is only what Dewey wants us to learn and teach our children, this could be accomplished in a relatively short time and would certainly not constitute the curriculum for an entire year much less a lifetime of continuous reconstruction. In education, his central concern is therefore with the development of the "thorough habits of thinking." In Chapter II we have considered the role of intelligence in inquiry, let us now look at its role in education with specific reference to the development of intelligence.

## II

### Development of Intelligence

There are at least two interpretations of "development of intelligence." In one sense, one may be making reference to the original development as was discussed in Chapter II. In the second sense, one may be making reference to the development that is now taking place in educational institutions, that is, the educational

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<sup>3</sup>J. Dewey, How We Think, p. 78. Italics in original.



process.

As it was indicated in the chapter on the metaphysical perspective, Dewey had a difficult time showing us how intelligence did, in fact, emerge from the strictly biological behaviour. Dewey avoided any teleological or mechanistic explanation of this emergence but he put heavy emphasis on the biological "needs, demands, satisfaction" cycle. The difference between the intelligent and the non-intelligent, according to Dewey, was not that the one had some special sort of "physico-chemical energy." The differences lie in the way the physico-chemical energies operate, and the different consequences that are forthcoming. In the animate objects, recovery or the restoration of the equilibrium is the consequence; for the inanimate object, saturation occurs indiscriminately and there is no tendency of the inanimate to maintain itself as it is. If the word "physical" is associated with the inanimate, the word most appropriate for the animate is "psycho-physical."<sup>4</sup> Psycho-physical denotes that the need-demand-satisfaction cycle is in effect.

Of course, for Dewey there is no problem with the relationship of the physical and the psycho-physical. It is simply a matter of qualities or differences of qualities and the most important quality is that of organization. Why animate organisms display this quality of organization is an empirical question that cannot be answered at this time in history, according to Dewey. We simply do not know

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<sup>4</sup>J. Dewey, Experience and Nature, p. 255.





enough about that issue. Since that question cannot be answered, Dewey moves on quickly to explain that the real difference between the animate and the inanimate is that of complexity of organization. The less complex are on the "physical" end of the scale, the more complex are on the "psycho-physical" end. The more complex interactions take on the quality of "mental."

Activity is psycho-physical, but not 'mental,' that is, not aware of meanings. As life is a character of events in a peculiar condition of organization, and 'feeling' is a quality of life-forms marked by complexly mobile and discriminating responses, so 'mind' is an added property assumed by a feeling creature, when it reaches that organized interaction with other living creatures which is language, communication. Then the qualities of feeling become significant of objective differences in external things and of episodes past and to come. This state of things in which qualitatively different feelings are not just had but are significant of objective difference, is mind.<sup>5</sup>

Mind, then, is the objectification of objects with language and is called "response to the situation."

There are three levels of development to this point; physical, psycho-physical (need-demand-satisfaction cycle) and mental (responses to the doubtful). Is intelligence the same quality as mind? Not according to Dewey, for whereas the mental quality is the response to the doubtful, intelligence is the directed response to the doubtful. The three (or four) levels that Dewey has indicated to us are not meant to be explanatory in that they might tell us how intelligence arrived. It just did arrive and that is what we have to deal with today.

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<sup>5</sup>Ibid., p. 258.



What is the relationship of the conception of 'intelligence' with education? It would appear that by definition, education must be concerned with intelligence for the definition of intelligence is so broad that it includes all forms of linguistic operations that are directed to one's situation. Education is then ipso facto a matter of intelligence. But this is not enlightening as we have no way to distinguish educational activities from the multitude of other activities that are also intellectual. That this "directed response" is the pattern of inquiry in action should not be of any great surprise, but it is not clear why one would have to set up an institution called education to develop this quality, for most of what we do as complex, organized organisms in the daily response to the environment, is, in fact, intelligence at work, according to this definition (description).

How then are these notions about intelligence related to the classroom and what should be happening there? According to Dewey:

After the conditions have come about and the new qualities have appeared, it is possible to form generalizations about uniformities and make predictions about the future occurrence of the qualities.<sup>6</sup>

It is these generalizations that are of concern in education, and according to N. C. Bhattacharya, "the generalizations about the forms and functions of intelligence in human beings and the proposals about its development are therefore the most important issues in

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<sup>6</sup>J. Dewey, "Experience, Knowledge and Value: A Rejoinder," in The Philosophy of John Dewey, ed. by P. A. Schilip, p. 600.



Dewey's educational theory."<sup>7</sup>

As has been noted in Chapter II, intelligence is the directed response to the problematic and entails having certain attitudes and developed natural instincts. There is a "good" way and a "bad" way to respond to the problematic. There has to be, otherwise education makes no sense; there is no justification for the establishment and continuation of the institution. What makes a response to the problematic good? Someone who is open-minded, wholehearted, and responsible, who has developed the capacity to control suggestions and ideas, who has a well-developed level of curiosity and thinks in an orderly fashion. These habits are necessary and perhaps sufficient, for intelligent thought. For just being aware of the skills of reflective thought is not sufficient for thinking, just as knowing the rules of hockey does not make one a good hockey player. In both cases, there are skills, attitudes, and habits that have to be developed for thinking or for playing hockey. In other words, intelligent thought has to be critical and creative.

John Passmore has indicated that in order to be critical, one "must possess initiative, independence, courage, imagination, of a kind which may be completely absent in, let us say, the skillful critic of the performance of a laboratory technician."<sup>8</sup> He later

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<sup>7</sup> N. C. Bhattacharya, "The Concept of 'Intelligence' in John Dewey's Philosophy and Educational Theory," Educational Theory, Vol. 19, No. 2, Spring, 1969, p. 190.

<sup>8</sup> John Passmore, "On Teaching to be Critical," in R.S. Peters (ed.) The Concept of Education (London: Routledge and Kegan Paul, 1967), p. 198



calls this combination of characteristics the "critico-creative" attitude, and it involves much the same dimensions that Dewey would have us believe for reflective thought or creative intelligence. Being critical is more than just knowing the rules of logic or having "mastered Max Black's Critical Thinking." It is more of a "character trait" than a skill, according to Passmore, and as such, is a difficult trait to acquire or to teach.

Dewey also claims that the traits of reflective thought are traits of character and "in the proper sense of the word, moral, since they are traits of personal character that have to be cultivated."<sup>9</sup> Dewey further refers to a general "readiness" to think, a very general disposition to be reflective in all that life gives to us, and tells that the personal attitudes "are essential constituents of this general readiness."<sup>10</sup> This appears to be the same sort of attitudes, fulfilling the same function that Passmore has made reference to. However, Passmore admits to the difficulty of passing on the critico-creative spirit to students as it must be done implicitly and in the same fashion as any other attitude. This, however, offers no guarantee that the desired result will come about. As a matter of fact, he suggests that "critical thought" be left till the later stages of one's academic

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<sup>9</sup> J. Dewey, How We Think, p. 33.

<sup>10</sup> Ibid., p. 34.





career, that is, the years in the university. It is at this point that we get a radical departure from Dewey. If reflective thought, or critico-creative thought is to be left till later years, of what value is the present for the pupil? Passmore is pessimistic about the chances of teaching the critico-creative thought till after one has gained the knowledge with which to be critical.

How does Dewey substantiate his claim that these general dispositions of thought can, in fact, be taught? Dewey does agree that the attitudes can only be passed on in an "indirect" fashion, that is, in order to pass on the traits of reflective thought one must fix the conditions or the exterior environment that will allow the attitudes to prevail.<sup>11</sup> One simply cannot teach someone to be curious or open-minded directly, in a straight forward fashion, but one can only set the conditions of the environment so that the attitudes will eventually prevail. When there is a teacher who displays the traits (himself) and sets the conditions in the classroom, then we have done what is necessary to foster or develop reflective thinking in the child.

Even with Dewey's notion of 'indirectness,' the structure of the development of reflective thought is not saved. Dewey is telling us that we have to develop the whole person; that is, someone who has the right degree of sensitiveness, curious in just the right way and to the right extent, persistent when problems

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<sup>11</sup>Ibid., p. 56.



arise, and the proper balance of suggestions and ideas. But there appears to be a gap between setting the proper conditions for the development of these traits and the achievement of the particular end-in-view. How does a teacher determine that his students have developed the traits sufficiently to solve problems according to the reflective method? How does he tell that the individual is sufficiently open-minded? Does he observe the individual in the problems of life to see if his answers are leading to the proper ends? I would think not, as that sounds like the older adult generation putting their stamp of rationality on the younger generation. How do I as a teacher, determine that the child has the proper amount of readiness to tackle life's problems? The inability to measure such qualitative features seems to be common place in our society today. We simply do not have any adequate means to determine the traits of character.

Not only would the teacher have a difficult time in determining the traits of the reflective method, but there is also a problem in determining the correlation between the conditions that are set up and the end result. Dewey talks about directing activity, noting the difference between work and play, leading the child from the concrete to the abstract, dealing with the practical, living the experiences, using language as a tool to develop organized meanings, and using observation and information, all as a means to set up the conditions for the development of reflective thought.<sup>12</sup>

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<sup>12</sup>J. Dewey, How We Think, p. 205. These represent the Chapter titles included in the section, "The Training of Thought."



In all of these activities there is a noticeable lack of correlation between the activity engaged in and the outcome. If the teacher lets the child deal with the practical, does that mean the child will develop open-mindedness or orderliness? How can Dewey show that from performing these activities the desired result will occur? It is extremely difficult, if not impossible, to establish that such a link or connection does exist, and it appears that Dewey has simply assumed that by doing the one, the other will result.

The child is encouraged to experience for himself and, in fact, Dewey claims: "I assume that amid all uncertainties there is one permanent frame of reference: namely, the organic connection between education and personal experience...."<sup>13</sup> Granted that children seem to learn more and better when they have the opportunity to deal with issues on a first hand basis, but this surely cannot mean that the child must experience each and everything himself before it becomes valuable to learn or even possible to learn. Apart from the impracticality of having the child relive or relearn the history of mankind for himself, there is the problem that certain parts of our history are not desirable to pass on as a first hand experience from generation to generation. Dewey admits this to be the case as "it is the business of the school environment to eliminate, so far as possible, the unworthy features of the

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<sup>13</sup> J. Dewey, Experience and Education (New York: The Macmillan Co., 1938), p. 12.



existing environment from influence upon mental habitudes."<sup>14</sup> If we as the older generation weed out the "undesirables," how do we avoid manipulating the young to conform to our standards? What sense can be made of the claim that the child must feel and experience those things for himself? He will only experience those things that are deemed worthy and valuable and that are directed his way by the teacher. From a conservative point of view this is an essential process, but from Dewey's point of view that is the procedure that has put the younger generation in a straightjacket that has turned their original modifiability into habit formations that seek to justify the existence of the sterile thought patterns of the older generation. He cannot, on one hand, claim that we, as the older generation, are stifling the young and, on the other hand, claim that we have to guide and direct them to weed out the undesirables from our society.

In one sense, Dewey assumes a moral structure of all thinking people. That is, if one has developed reflective thought, one will have the traits necessary to make good moral judgments. Nowhere does he defend, for example, open-mindedness, wholeheartedness, etc. as morally good per se, it is just obvious to all that these are desirable. He describes them to us, but he does not see the need to defend them as moral. In his words:

Our moral failures go back to some weakness of disposition, some absence of sympathy, some one-sided bias that makes us perform the judgment of

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<sup>14</sup>J. Dewey, Democracy and Education, p. 20.







the concrete case carelessly or perversely. Wide sympathy, keen sensitiveness, persistence in the face of the disagreeable, balance of interests enabling us to undertake this work of analysis and decision intelligently are the distinctive moral traits--the virtues or moral excellencies.<sup>15</sup>

Unless the youth develop these traits, we will have careless and perverse individuals as a result, and one can see the direct correlation between having the dispositions and being moral. Thinking people, one can assume, will be moral.

With the thinking process starting with the problematic, and also that each child must begin with his own personal experience, we are led to conclude that unless the child perceives the problems or at least a problem, then no thinking can commence. Dewey, of course, will tell us that if the child is placed in a field of experience, a problematic situation will be a condition of his experience. But that does not tell us that the child must see a particular problem. He may remain in a somewhat indeterminate situation. If that is the case, how does the teacher lead him to reflective thought? Only by becoming very directive and re-arranging the conditions over and over till the problem is perceived. This, in turn, causes problems with Dewey's notion of the role of the teacher which will be discussed in a later section of this chapter.

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<sup>15</sup>J. Dewey, Reconstruction in Philosophy (New York: Henry Holt and Co., 1920), p. 164.



## III

Education As Growth

Having discussed the relationship of the pattern of inquiry to the development of intelligence, I now wish to examine more closely the end state of the inquiry method as it relates to education. Education, for Dewey, is subordinate to nothing save more education. His terminology is "growth for the sake of growth." Perhaps no other term in education has stirred more controversy than this one single concept. I shall attempt to give as clear an explanation as possible before pressing comment upon it.

According to Dewey, as a society grows, that is, as the customs are passed on from generation to generation, prevailing notions of the past generation are given to the new generation. It is this "movement of action toward a later result is what is meant by growth."<sup>16</sup> Very quickly we attain the notion that growth must lead us somewhere although not to any fixed point or position. The basic stuff of growth is what Dewey calls "immaturity" and the goal is to lead one to "maturity." But even in the "stage" of maturity one is in a constant growth pattern and although Dewey does not tell us where one goes after maturity, there is a continual development involved.

Immaturity is not just a lack of capacity to achieve, it is a "power to grow," it is a positive forceful entity. According to

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<sup>16</sup>J. Dewey, Democracy and Education, p. 41.



Dewey, if we look at immaturity as a strictly negative force, we have to establish a fixed end or notion of development to account for growth. If immaturity is a lack of power, then gaining that power is to "arrive."

Dewey also considers the notions of 'plasticity' and 'habit formation.' Insofar as these have been covered extensively in Chapter III, I shall not dwell on them at this point. Suffice it to say, that habit formation becomes the means for the development of control, and the power to change. Habits have the negative restricting element as well as the positive agency of action that allows development. Even the negative element is of value because by developing habits that restrict flippancy, laziness, etc., we are better able to think reflectively. Growth, therefore, is the changing, developing, maturing process that might be referred to as "life."

What is the educational import of the concepts of 'growth' and 'maturing?' "Our net conclusion is that life is development, and that developing, growing, is life. Translated into its educational equivalents, that means (i) that the educational process has no end beyond itself; it is its own end; and that (ii) the educational process is one of continual reorganizing, reconstructing, transforming."<sup>17</sup> To make sense of the above quote we may have to conclude that life (that is the process of living) is to be

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<sup>17</sup> Ibid., pp. 49-50.



identified with development, and that this, in turn, is identical with the term education. Education is life, education is development, life is development, etc. Without such strict identification it is not clear how Dewey can move from the first portion of the above quote (that is the first sentence) to the second sentence. It is not clear what "translated into its educational equivalents" might mean and logically entail. Dewey may be simply saying that educational is "like" life, and by saying this, he may be simply giving us an analogy. If this is the case, then no identification is necessary. This would be a more acceptable explanation in that there are some negative aspects in life that one would not want to include in the concept of development or education, and for this reason, a strict identification is difficult to defend.

That this is an analogy is the easiest position to defend as Dewey says, "The inclination to learn from life itself and to make the conditions of life such that all will learn in the process of living is the finest product of schooling."<sup>18</sup> And further, "hence education means the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age."<sup>19</sup> Education, therefore, is the process of setting up the proper conditions in life so that proper development can take place. Even

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<sup>18</sup>Ibid., p. 51.

<sup>19</sup>Ibid., p. 51.





the title of the chapter in Democracy and Education is "Education as Growth," and this indicates the possibility of an analogous relationship. Education can be viewed as growth in the sense of growing, that is, having no end beyond itself.

The problem with this particular interpretation is that Dewey further states that "Since growth is the characteristic of life, education is all one with growing; it has no end beyond itself."<sup>20</sup> This is a very confusing statement. There are three portions that need to be considered; the antecedent statement, the consequence and the interpretation of the consequence. The antecedent statement is that "growth is characteristic of life" and the consequence is "education is all one with growing." Does this mean that education is growth in the sense that education is identical with growth? Or does it mean that education is like growth in that it has no end beyond itself? What is the logical implication of "is all one with?" Dewey's statement is ambiguous.

If one were to attempt to save Dewey from this ambiguity, one would have to claim that Dewey is using the word "education" in two different ways. One, where "education" means formal education as in "schooling" and the job of this education is to set the conditions for growth and development in life; and two, "education" in the sense of life and living and all it entails, that is, education is life, education is growing. In this latter sense, we

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<sup>20</sup> Ibid, p. 53.



can ignore Dewey's use of education as it is too vague and ambiguous as it is describing the totality of experience. This is non-distinguishing, it includes the positive growth and the negative growth and the "ungrowth" and all the rest that life has to offer. It must do this, if education is to be identical with life.

We can only conclude then, that education (schooling) sets the conditions for growth in life, and, that like life, it has no end beyond itself. Growth can be for the sake of growth, and education is for the sake of education.

It should be pointed out that however we choose to interpret Dewey's aim of education, as growth itself or as the condition of growth, it is substantially different from the contemporary trends in education during his time. There was lip service to Dewey, especially by some liberals, but invariably some particular aim was always established. For example, according to Dupuis, Spencer's ideas had a profound effect during the early 1900's and they are listed as follows:

(1) Healthful living and other aspects of human living that are essential for self-preservation; (2) vocational training and other practical arts which the person needs in order to survive; (3) preparation for family living, i.e., begetting and rearing of children; (4) worthy citizenship; and (5) worthy use of leisure time.<sup>21</sup>

By 1938 the Educational Policies Commission of the N.E.A. came out with the Purposes of Education in American Society and they were

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<sup>21</sup>Adrian M. Dupuis, Philosophy of Education in Historical Perspective (Chicago: Rand McNally and Co., 1966), p. 135.



listed as: "(1) self-realization, (2) human relationships, (3) economic efficiency, and (4) civic responsibility."<sup>22</sup> Although one may wish to take issue with the particular goals outlined, they did have specific goals and aims in education. They may even be interpreted as "growth aims" in that the educators endeavored to produce better people in these domains, but the growth was in specific directions and for specific reasons.

The central criticism of John Dewey's notions of growth and education, and by now a common criticism, is that the goal of growth for its own sake is too non-directional to be of any value as an educational goal. If we look at a generic definition of growth or development, that is without reference to a specific form or type of growth, we can see where the inadequacies lie. Take for example, E. Nagel's analysis of the concept of 'development.'<sup>23</sup> He claims that in order to say that any development or growth has taken place, there are three logically necessary conditions that have to be fulfilled. They are (1) denoting a pre-existent state, (2) indication of an irreversible sequential order and, (3) an end state. That is, there must be something that we start with, there must be an order or a series of changes (he claims irreversible changes), and then we need something that can be pointed to as an end state to indicate the degree and type of

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<sup>22</sup>Ibid.

<sup>23</sup>R. S. Peters and P. H. Hirst, The Logic of Education (London: Routledge and Kegan Paul, 1970), p. 43. Peters and Hirst make reference to E. Nagel's concept in connection with the concept of 'development.'



change. Since these are claimed to be logically necessary conditions of the concept of 'development,' the denial of any of the three stages will result in a self-contradicting statement. For example, if we do not indicate an end state, we cannot claim that the changes were development or growth.

In Dewey's case, it is easy enough to point to a pre-existent state as long as one does not get caught up with trying to determine a pre-existent state prior to birth or in the sense of some sort of innate idea at birth. The pre-existent state is simply the child that one starts with when the educational processes commence. The sequential order is also no special problem as Dewey is constantly insisting on existential changes (irreversible), reconstruction of experience and the like. It is when we arrive at the end state that Dewey's notions run afowl of the concept of 'development.' If there is not a standard to point to, an end-in-view that has been aimed at, in the sense that one can say "it" has been achieved, then no notion of growth can be defended. Granted that Dewey has constant reference to an end-in-view, but this is always in terms of the ongoing process of reconstruction, and in effect, it is determined after the testing occurs, not as a goal for inquiry to achieve. To be consistent with the pattern of inquiry, Dewey would have to avoid any reference to a goal apart from the conclusions of inquiry. Dewey is caught in a double-bind. To the extent he gives us goals and aims he moves away from the notion of growth





for the sake of growth, and to the extent he moves toward having no ends he can no longer talk about development and growth.

It is not even clear how an educational goal can be established on the basis of inquiry. The justification of education has been that one can improve the society by teaching the young the things they will have to know in order to live in society. The assumption was there that an improvement of society would result and thereby justify the educational system. For Dewey, the only improvement is more "improvement," but he has no way to indicate the latter improvement has taken place. Growth is valuable in and of itself, but the question is "How does one determine that one has grown?" If education (schooling) is to set the conditions for growth, then one has to make some decisions of what those conditions are and how they will affect the individual. But this is the process of setting up an end, a goal to be reached; whether or not inquiry is used to reach that goal is not relevant, an end has still been established that we may know if we are educating or not.

Dewey, of course, is arguing against the notion of fixed end because it stifles and mis-directs the inquiry method. But his position rests on the idea that there are no fixed ends, and, therefore, he avoids ends altogether. Dewey's substitute is the end-in-view. But the end-in-view is defined as the process itself so in effect we have change but in no particular direction. We can have change but no growth. There must be a goal fixed long



enough to determine that the change has been in the "right" direction. One does not need a static goal, but one does need a standard in the sense that the serial changes can be shown to have come to an end (temporarily) and that the judgment can then be rendered that the change has been an improvement. Since Dewey maintains that growth is its own end, no growth can be shown to have occurred and, therefore, in the analogy, no education can be shown to have taken place.

Dewey has indicated that the function of growth is to take the immature to a stage of maturity. If we are going to make sense of that at all, "maturity" must be recognizable, we must be able to indicate what is mature and what is not. This is a goal, an end, even if it is a flowing or developing end (that is, what is considered mature now may not be considered mature later). To say, then, that growth is moving from the immature to the mature, but that we have no real end, is meaningless. For the sake of the theory of inquiry, Dewey must have no ends, but for the sake of development he must. The concern for fixed ends as opposed to end-in-view is a redherring, as no one is going to claim that our notion of "maturity" is never going to change; it is in a constant state of change as language and society change.

We can only make sense of the relationship of growth and education by stating that education is the process of setting the conditions that enable and encourage growth. Growth is the aim of



education, and we can then sit down and establish what that end state is going to be. We can then give up the vague notions that "education is growth" and that "growth is education." These make no clear sense at all.

The concept of immediacy holds a central position in Dewey's philosophy. Events are given, immediate and had, and events and experience form the pivot for the reconstruction of experience. In a similar fashion, the concern for immediate experience plays an important role in his educational recommendations. In some of his writings, Dewey is stressing the "immediate appeal" and "as long as any subject makes an immediate appeal, it is not necessary to ask what it is good for."<sup>24</sup> It is statements like these that have lead some educators to make conflicting claims about the value of any given curriculum. Basketball, cooking peas, or mathematics, as long as they have immediate appeal, they are valuable, and equally so. Dewey appears to be in difficulty here as well. On the one hand, he wants to show that the traditional schools are inadequate and lead to the stifling of thought, and on the other hand, he has to show that reflective thought cannot be developed without discipline, control, direction, and orderliness. In the end, he had to settle for the notion that the pupils' "activities are nevertheless, more than immediately enjoyable since they promote having desirable future experiences."<sup>25</sup> In an

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<sup>24</sup> J. Dewey, Democracy and Education, p. 241.

<sup>25</sup> J. Dewey, Experience and Education, p. 27.



effort to reconcile the two notions, he takes the middle course. Those things that have immediate appeal are valuable, and in themselves, but also only because they can lead us to future valuable experiences.

The stress for the future role of experience never really left Dewey, that is, it always seemed to be there. For example:

Accordingly, any subject, from Greek to cooking... is intellectual, if intellectual at all, not in its fixed inner structure, but in its function--its power to start and direct significant inquiry and reflection.<sup>26</sup>

Any subject is valuable in that it leads us to inquiry and to future reconstruction of the present. This has been misunderstood by some educators who would want everything to be intellectual, and they seem to have missed the emphasis on the "functional" aspect of any subject. No subject is valuable unless it leads to further (future) desirable experience. "The educator by the very nature of his work is obliged to see his present work in terms of what it accomplishes, or fails to accomplish, for a future whose objects are linked with those of the present."<sup>27</sup>

#### IV

##### Role of the Teacher

In a discussion of the educational implications of the pattern of inquiry not only must we consider the possibility of what is being

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<sup>26</sup>J. Dewey, How We Think, p. 47.

<sup>27</sup>J. Dewey, Experience and Education, p. 91.





taught, but who will teach it and how it will be taught. Dewey changed his position on the role and expectation of the teacher as his educational theory developed. N. C. Bhattacharya indicates there are at least three shifts of emphasis ranging from 1902 (The Child and the Curriculum) to 1938 (Experience and Education).<sup>28</sup> The three positions include that of guiding and sharing one's knowledge, to being a co-learner, and finally that of being like a "head-carpenter" and having apprentices. The stress will be on the amount and type of control the teacher will exercise on the pupils.

In The Child and the Curriculum the central theme is that there should be no discontinuity between the child and the curriculum. The pupil is not left "entirely alone," that is, he is guided and directed, and the pupil's present activity is not educational in and of itself.

It will do harm if child-study leave in the popular mind the impression that a child of a given age has a positive equipment of purposes and interests to be cultivated just the way they stand.<sup>29</sup>

Thus, Dewey was aware that children with their childish ambitions and delights would have to be led to where they were not at present. The conditions and environment would have to be selected to encourage that development. The role of the teacher could be

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<sup>28</sup>N. C. Bhattacharya, "The Role of the Teacher in John Dewey's Educational Theory," Alberta Journal of Educational Research, Vol XIII, No I, March 1967, p. 34.

<sup>29</sup>J. Dewey, The Child and The Curriculum, and The School and Society (Chicago: University of Chicago Press, 1960), p. 15.



said to be primarily one of guiding and sharing one's knowledge with the students. It was because of the teacher's superior knowledge that he was able to make the necessary decisions to set the proper conditions so that the development would be "suitable." Towards the end of the essay Dewey says:

Now the value of the formulated wealth of knowledge that makes up the course of study is that it may enable the educator to determine the environment of the child, and thus by indirection to direct. Its primary value, its primary indication, is for the teacher, not for the child. It says to the teacher: Such and such are the capacities, the fulfillments, in truth and beauty and behaviour, open to these children. Now see to it that day by day the conditions are such that their own activities move inevitably in this direction, toward such culmination of themselves.<sup>30</sup>

Here we see the role of the teacher as a guide, but it is difficult to reconcile how the guide can direct the educational progress of the pupils if one is to claim that the goal of education is simply more education. At this early stage, the role of the teacher does not seem compatible with the notion of "growth in general." If, on the other hand, we tend to accept the notion that education only sets the conditions and that the aim of education is growth, there seems to be some compatibility between the teacher as a guide and this aim of education.

A second view of the role of the teacher is presented in Democracy and Education. Here the teacher leaves the role of director of conditions as a primary function and he takes on the role of a "co-learner."

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<sup>30</sup> Ibid., p. 31. Italics in original.



When the parent or teacher has provided the conditions which stimulate thinking and has taken a sympathetic attitude toward the activities of the learner by entering into a common or conjoint experience, all has been done which a second party can do to instigate learning. The rest lies with the one directly concerned ....This does not mean that the teacher is to stand off and look on...but participation, sharing in an activity. In such shared activity, the teacher...and upon the whole, the less consciousness there is, on either side, of either giving or receiving instruction, the better.<sup>31</sup>

The teacher still sets up the conditions, but that appears to be done before the activities of an educational situation commence. During that process called education the less conspicuous the teacher-learner role the better the process. The teacher should not be imposing in the role of teacher, and the pupil should not be underestimated in his role as learner. They are, in fact, two people "learning" together.

Unfortunately, Dewey's views on the teacher's role do not appear to be consistent throughout Democracy and Education. He claims that the school (teachers) has three primary functions. First, the school will break down the complexities of the society and present it to the students in a fashion they can understand; second, it will weed out the elements of the society that are undesirable; third, it will present the society in a proper balance so that "each individual gets an opportunity to escape from the limitations of the social group in which he was born."<sup>32</sup> It seems that in the decision and determination of the conditions of the

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<sup>31</sup>J. Dewey, Democracy and Education, p. 160.

<sup>32</sup>Ibid., p. 20.





educational process the teacher still has that role of "director" and "guide" of the pupils, but the actual guiding was taken out of the classroom situation and put into the preparation stages of teaching. Nonetheless, the teacher still has to make basic decisions about what is desirable and what is not, and what will lift a child from the social position he was born into.

Thus, the change, as dramatic as it might first appear, is really a change of emphasis. To further substantiate this claim, Dewey makes reference to the fact that there are some "values" that can be used as a guide so that the teacher can decide which activities can be educational and which are not education. He says:

We may say that the kind of experience to which the work of the schools should contribute is one marked by executive competency in the management of resources and obstacles encountered (efficiency); by sociability, or interest in the direct companionship of others; by aesthetic taste or capacity to appreciate artistic excellence in at least some of its classic forms; by trained intellectual method, or interest in some modes of scientific achievement; and by sensitiveness to the rights and claims of others--conscientiousness.<sup>33</sup>

In a stroke, we have five values that should guide the school and the teacher: conscientiousness, scientific achievement, aesthetic appreciation, sociability, and efficiency. Dewey disclaims these to be values, but how do we reconcile these with education being its own end? There is no way to do that. These are straight forward examples that might even fit a traditional

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<sup>33</sup>Ibid., pp. 243-44.





conservative setting. It seems that the teacher as learner is just a maneuver or "pedagogic ploy" for the sake of the students. While in the classroom, he is just another learner, before class begins he is the teacher.

Dewey attempts to clarify the situation in Experience and Education. By this time (1938), the progressive movement was well entrenched in the American school system. Ten years earlier Dewey had disclaimed the so-called progressive movement and said:

There is a present tendency in the so-called advanced schools...to say, in effect, let us surround pupils with certain materials,...and then let the pupils respond to these things according to their desires....

Now such a method is really stupid. For it attempts the impossible, which is always stupid....Since the teacher has presumably a greater background of experience, there is the same presumption of the right of a teacher to make suggestions as to what to do, as there is on the part of the head carpenter to suggest to apprentices something of what they are to do.<sup>34</sup>

We get a brief insight here that the teacher is to his students like the head carpenter is to his apprentices. That is, the teacher has certain information that he desires to pass on to the students, and he guides and directs them till they master the knowledge. This is substantially the same role as in Child and the Curriculum. The child cannot be left to his own devices and desires and be expected to accomplish something educational.

But then, Dewey tells us in Experience and Education:

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<sup>34</sup>J. Dewey, et. al., Art and Education (The Barnes Foundation Press, 1929), p. 180.



That a man may grow in efficiency as a burglar, as a gangster, or as a corrupt politician, cannot be doubted. But from the standpoint of growth as education and education as growth the question is whether growth in this direction promotes or retards growth in general. Does this form of growth create conditions for further growth, or does it set up conditions that shut off the person who has grown in this particular direction from the occasions, stimuli, and opportunities for continuing growth in new directions?<sup>35</sup>

Now we are back to growth in general and growth as education. It may appear that being a burglar is all right if it leads to further growth in the general sense. If Dewey is to tell us that it is wrong to be a burglar, and that direction retards growth, he is going to have to come back to some of the values that he has both stated and disclaimed. His delight for continual reconstruction of experience, and the fact that this reconstructing inquiry must not have any pre-determined end has led him to make ambiguous statements about the practice and purpose of education.

# V

## Concluding Remarks

I have attempted to demonstrate that Dewey felt his method of inquiry to be a particular manner of behaving, a general disposition to certain attitudes, a general metaphysical perspective and a general knowing process that together described a way of living. All of these factors combine, for Dewey, to provide

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<sup>35</sup> J. Dewey, Experience and Education, p. 36.



mankind with a method for solving any and all problems that confront them. His supreme optimism was dampened only slightly by a more realistic view of the possibilities of successfully changing human nature, its customs and habits. I have also attempted to show that Dewey was unwarranted in his optimism about his method of inquiry. The metaphysical and psychological foundations are weak in their internal structure and the method itself has many weaknesses, such as the difficulty in showing just how inquiry can even take place, at least from a theoretical point of view.

Within the metaphysical perspective in Chapter II, the three central notions of nature, experience, and intelligence all have particular problems that relate to inquiry and the performance of inquiry. The immediacy of the primary event and how this correlates with the objects of reflection remains a mystery. Dewey has no way of showing how the immediate becomes secondary and mental (reflective) which is of course the reflective method. I cannot know the immediate nor do I "have" the secondary, yet one leads to the other and vice versa. The secondary objects are "objects of relations" and Dewey never clarifies how a thing can be a relationship or more appropriately, how a relationship can be an object. This is the inquiry method from the metaphysical perspective, yet the gap remains between having and knowing.

Knowledge, for Dewey, has to have a functional status as one inquires into the possible only, not the final and absolute. Yet the mathematical-mechanical order is as absolute and constant as



any of the Platonic Ideas. This order bridges the gap between the apparent and the non-apparent for Dewey, but in order to maintain consistency of experience this order is constant, even absolute. If knowledge is to be the non-absolute, the end-in-view, how then does the mathematical-mechanical order relate to the knowing process and the end product of knowledge? Since we do not see the constant order of relationships, the existence is assumed or inferred. This a priori process is very similar to the establishment of Locke's substance and is certainly not consistent with the stated intent of the inquiry method.

The concept of 'experience' suffers from similar problems. Experience, that objective relationship between man and objects, constitutes a situation. But just what is a situation? If all of nature could be a situation, the experience of nature coincides only with my experience. This is hardly a valid position to try to maintain. But experience, according to Dewey, must be that objective relationship between man and object. There cannot be a distinction between the world of experiencing and the objective "out there" world. This would lead Dewey into a dualistic world which is something he must avoid, perhaps at all cost. To overcome this dualism all our experience becomes part of the objective world of nature and a close identification of the two takes place. How does this affect inquiry? Inquiry is the directing of this experience in nature. The name of this directing of experience is intelligence.





Intelligence is the name for the direction of activities and this is of course another way of talking about the inquiry method. Not only is inquiry an intelligent way to behave, it is actually called intelligence. It is not important whether intelligence is adaptive or creative as a quality, it is only essential that the activity be directed to an end-in-view and the directed response becomes intelligence. This does not explain to us how one proceeds from a state of having an experience to the state of knowing. Intelligence as a concept, does not set out for us the procedural steps that are entailed in the development of knowledge. The gap remains as long as I cannot know my immediate experience and yet must refine the immediate by application of the secondary reflective thought process called inquiry.

The connection of the method of inquiry to the psychological perspective is even closer than it is to the metaphysical perspective. How we behave and think is the foundation of being able to think clearly in the method. The right attitudes and habits in effect guarantee the success of the method because the inquiry method is to have the proper attitudes and habits. Dewey's gestaltian view of the organism where we are "habit," overcomes any dualistic notions of body and soul and one's behaviour becomes controllable and directable if the proper habits are maintained.

The correct habit formation is of course essential when one is considering educational structures and when one wants to



consider what and how the curriculum should be presented in the classroom. Dewey is very clear on what should be taught in the classroom, that is, clear in the sense that he refers specifically to what should take place in school. That, of course, is the reflective method and it is not just the reflective method in the abstract. There are particular habits to be fostered and particular instincts to be developed. The greatest difficulty arises at this point. Even though the intent is clear, one is not at all clear on how Dewey proposes to teach open-mindedness, wholeheartedness, and responsibility. He does not even make clear what he thinks one would be like if one were open-minded or responsible.

Dewey's notion of "instincts" also causes some degree of confusion. They are not the same as habits (which are directed and organized), yet they can be developed and encouraged or discouraged. It is therefore difficult to see how the instincts differ from the habits that allow direction and control of behaviour. Since instincts have a fundamental role to play in the changing of habits and, therefore, in the development of reflective thought, the issue of instincts is a vital one. If instincts or impulses are the pivotal points of all behaviour change, we had better be clear on what is entailed by the notion of instinct. This clarification Dewey does not give us.



Intelligence and the proper use of the reflective method both relate to this psychological perspective. The habits and instincts are the matrix of the behavioural functioning of the method. Yet this very matrix raises very serious questions as to the nature and structure of the "stuff" of inquiry.

Chapter IV covers the questions concerned with the method per se. As a controlled and directed transformation of a situation, inquiry, a form of logic, sounds very much like the patterns discussed in the metaphysical and psychological perspectives. This confusion or identification of functions leads to a series of questions that Dewey never comes to grips with in adequate fashion.

The five steps of the inquiry method appear to arise "out of" one another. That is, the indeterminate situation leads to the formulation of a problem, this in turn leads us to facts, data, and ideas. However, the connecting link between these functions is not explained. The indeterminate situation is simply a condition of existence; the problems simply arise out of the situation; the ideas and facts arise from the awareness of the problem; the solution is simply forthcoming, etc. This problem is particularly important when discussing the origin of logical forms. Do the forms arise out of inquiry into experience? In that case how does one inquire without inquiry? Do the forms originate out of inquiry into inquiry? In that case how does one avoid an infinite regress? It appears that inquiry, for



Dewey, is as natural an event as any other event and it simply arises from our experience, and one gets the notion that inquiry is as necessary in our experience as is the problematic situation.

Even the original situation is not without its difficulties. In what sense is a situation indeterminate and yet an experience that can give meaning and order? That is, just what it is that is indeterminate is never really answered. The determinate situation also has its problems. How does one determine that enough inquiry has been done? How does one determine that one has a solution that will work? Are not all situations this side of the indeterminate situation more determined than the last? If there is not an end situation, one can make no sense of the expression "the end of inquiry" for if there is no end, there are no warranted assertions.

The role and explanation of the concept of judgment is a critical issue within the context of inquiry as well. Judgment and inquiry are used as synonymous words and yet the steps in the process are also called judgments. This circular type of explanation is of course not illuminating in the least, but when coupled with the conceptual confusions resting with the notions of the subject, predicate and copula of judgment, the whole concept becomes singularly obscure. All of these issues seem to relate to the central question of the metaphysical, psychological, and logical explanations of inquiry, viz., what is happening when the brute experience emerges into inquiry and vice versa. Nowhere





in Dewey's explanations does he adequately cover how this step takes place, nowhere does he adequately explain how one moves from having an experience to knowing, or from the problematic to the determinate.

It would have been better if Dewey had not attempted to defend inquiry as a panacea for all our problems and had simply presented the method as one of the better ways of looking at problems so that solutions may be achieved. It is not a scientific method, it is not an attempt to explain phenomena and experience, it is only one way of looking at our experience. I suppose if the lesser stance had been taken, Dewey would not have been taken so seriously by educators and others on whom he had a great effect. However, the dispute still goes on as to whether that effect was a good or a bad one.

Certainly in the field of education, many have claimed to derive their ideas from John Dewey. However, Dewey in turn disclaimed many of them. The confusion seemed to arise from the issue as to whether Dewey was prescribing a new method or a new content or both. Many of the so called progressives took the latter position and extensive changes were made in both the method and content of the curriculum. I would take the position that Dewey was primarily concerned with the method of producing a thinking individual, viz., a person who is directed, orderly, responsible, curious, etc. Nowhere does he promote a free open school in the sense that the child is allowed to decide what he



or she thinks is valuable or not. Dewey thought the method was right and it had to be passed on and in just the right way. Also, he considered the content valuable and was fixed to the extent that facts and data had to be mastered and certain attitudes and habits had to be gained. How to accomplish both seemed to be the question. Very few had answers. Even Dewey was not sure as he appears to vacillate in his explanations of the teacher-pupil relationship. At one point, the teacher was to be the director and controller of the activities, later, merely a facilitator of projects (with the teacher really making the decisions behind the scenes), and then back to the analogy of a carpenter and his apprentices.

What are we to make of this for education today? Insofar as Dewey could not even settle on a particular role for the teacher, it is no great wonder that such confusion is still with us today. Dewey was against taking any particular "ism" to heart, even if the "ism" was progressivism. Dewey said it this way:

...the general principles of the new education do not of themselves solve any of the problems of the actual or practical conduct and management of progressive schools. Rather, they set new problems which have to be worked out on the basis of a new philosophy of experience. The problems are not even recognized, to say nothing of being solved, when it is assumed that it suffices to reject the ideas and practices of the old education and then go to the opposite extreme.<sup>36</sup>

What had appeared to be an easy answer for the progressives turned out to be the most problematic area of all. The easy

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<sup>36</sup> Op. Cit., John Dewey, Experience and Education, p. 9.



solution was just to do the opposite of whatever the conservatives had done. If the traditional school had rigid discipline and well ordered studies, then the answer was no discipline and no set order of studies. True to Dewey's prediction, the outcome was not well. The progressive schools soon had their share of problems for which there was no ready answer.

Dewey thought the solution lay in a "well thought-out philosophy of the social factors that operate in the constitution of individual experience."<sup>37</sup> Unfortunately, these individual experiences when connected to the social factors in Dewey's frame of reference, only produce the method of inquiry. The thrust of this dissertation is towards showing that Dewey was not successful in showing us the solution to the problems. As much as Dewey disliked dualism and either/or dilemmas, there does not appear to be a successful way to show how the two schools of traditionalism and progressivism should merge to provide the individual experience that is socially directed. One is caught in the position of having to accept one or the other.

Dewey's criticisms of the traditional school and his insistence on process and development did have their positive influence. The concern for the method of teaching was sharply increased and new methods were forthcoming. Their effectiveness is a matter for an empirical study, nonetheless, in general, it can be stated that

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<sup>37</sup> Ibid.



they had a positive effect on the teaching in the classrooms. As a general result, better trained teachers who were in fact interested in the individual were produced by the post-secondary schools. This, of course, was not sufficient to overcome all the other problems that were raised, especially those connected with the question of the role of the individual in the society.

This essay has been, on the whole, very critical of many of Dewey's philosophical formulations and educational recommendations. Since Dewey himself described philosophy as a "critical organ" for dealing with the social, cultural, educational, and other problems and gave the discipline the name criticism, one has no reason to offer an argumentative defense for an exercise of this sort.

John Dewey, and the pragmatists generally, did not believe in any ultimate or final truth or in any permanent solution of the problems of mankind, intellectual, moral, political, or of any other kind. Though Dewey himself was very critical of what he called traditional ideas and ideals, he always qualified his own recommendations, viz., on the scientific method, democratic way of life, and the new or progressive education by adding the words that "this is the best we have known so far." For him, philosophy was not a quest for certainty, and he boldly urged that philosophers should directly confront the fundamental problems of the "present day society."

In his own survey, analysis, and examination of the problems of men in his contemporary society, Dewey made many mistakes. Science, as he expected, had not become 'open,' nor had the





'schools of tomorrow' he so fondly hoped for become a reality.

In the meantime, his 'tomorrow' has become our 'yesterday.'

Nonetheless, John Dewey was a man of vision and an optimist. His eloquent plea to bring creative intelligence to the service of men in the struggle for a better world should be an inspiration for generations to come. He never claimed that his own philosophy had answered all the questions that he himself faced, and insisted that,

Philosophy has a work to do.... It may turn to the projection of large generous hypotheses which, if used as plans of action, will give intelligent direction to men in search of ways to make the world more of worth and significance.<sup>38</sup>

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<sup>38</sup> J. Dewey, Problems of Men, p. 20.



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